


A HISTORY OF PHILOSOPHY

LEO F. MILLER, D. D.

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A HISTORY OF PHILOSOPHY

BY

LEO F. MILLER, D.D.

*When Professor of Philosophy in the
Pontifical College Josephinum*

WITH AN INTRODUCTION BY

MOORHOUSE F. X. MILLAR, S.J.

of Fordham University

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INTRODUCTION

By MOORHOUSE F. X. MILLAR, S.J.

Philosophy seems to be coming into its own again. The intimate connection between theory and practice is once more coming to be recognized even by those who may still hesitate as to how the correct and sound theory is to be ascertained. The fact that our civilization stands based in such large measure upon the cultural thought of Greece, and that this thought owes its humanistic value in the main to the Greek pursuit of metaphysics, is, if we may judge from the many recent works on Greece, receiving an acknowledgment which contrasts strikingly with the utter neglect with which all things Greek and Latin were recently threatened in our universities and colleges. Then, there is the new interest in the Middle Ages, centering around a growing appreciation of medieval Scholastic philosophy, together with the general admission of the failure, due to utter inadequacy, of all the more modern systems.

What is most in need of being emphasized at the present time is, that philosophy is essentially a matter of tradition—not that its truth or falsity is dependent upon its being traditionally received, but that no philosophy worthy of the name can be wholly the product of the intellect of any one man. For better or for worse, any system will be dependent upon the results achieved or the errors made in previous thought. This is as true of the modern systems, which boast of their originality in the sense of not being traditional, as of that *philosophia perennis* which openly claims to be the resultant of the cumulative thought of the ages. Such being clearly the case, the connection of the study of the history of philosophy with the study of philos-

ophy itself should be evident. Unfortunately, this has not been sufficiently realized in the past. In most non-Catholic colleges, it is true, courses in philosophy have consisted mainly in a mere review of the many and varied systems that have been held in the past, without the guidance of any set of principles to act as a sort of Ariadne thread leading through the labyrinth. This is almost bound to result in intellectual bewilderment and scepticism, nor can such a course be rightly considered as truly presenting the history of philosophy. In our Catholic colleges, on the other hand, where the one system of Scholastic philosophy is taught, too little attention is usually given to the manner and conditions under which human thought has developed. The outcome of this neglect is not, as some would put it, that philosophy itself is made to appear unreal (for it is essentially engaged in the study of reality), but that it is unduly dehumanized. It is made to appear in surface dimensions only, and without that depth which the realization that the problems discussed are a matter of genuine humanism can alone convey.

This humanistic value of philosophy is best grasped when the various doctrines are considered in their historic origin. Only thus will they each, as now traditionally understood, stand out as the solution to an actual and once besetting problem of the human mind. But this presupposes that the history of philosophy itself be presented, not as a mere conflict of systems (with the last destroying the one that preceded it), but as an evidence of man's abiding effort, more or less successful, to adapt his thought to things, each system either supplementing what was inadequate or correcting what was thought to be erroneous. This continuity in development is best illustrated in the case of the earlier Greek thinkers. Speaking of Anaxagoras, Father Miller furnishes a striking instance of this where he says:

"The philosophy of Anaxagoras is a great step forward in Greek philosophy. He has overcome the materialistic, pan-

theistic, atheistic, and polytheistic views of his predecessors, and laid the foundation of true philosophy by the statement that the intellect alone is the cause of order. Socrates took up this principle with enthusiasm. Plato and Aristotle built upon the foundation of Anaxagoras. He discovered the only true method of proving the existence and nature of God. His theses, his arguments, his very terms constitute the central parts of Christian philosophy."

Then there is the further question of accounting for grave departures from the sounder tradition, especially where the causes are extrinsic to all philosophical pursuit. Treating of the decline of Scholasticism, the author's remarks are not without a suggestive lesson at the present time:

"The philosophical work carried on in the universities took on a superficial character. Light work leading to immediate results took the place of the long and patient toil of the researcher, and the result was a baneful mediocrity. Short courses leading to degrees were established in the universities, examinations were often reduced to the level of formalities."

Finally, there is the matter of accounting for a persistent tendency in a wrong direction owing to the initial failure to raise the right question accurately at the start. In dealing with the period of the Enlightenment, the author gives us an insight into the source of its many futilities. He states:

"The fundamental error in the Enlightenment's theory of ethics is the view that morality is foreign to the nature of the individual. Ethics was so extensively studied in this period, because it not only seemed foreign to the individual, but also because, once this principle was accepted, the question arose as to the motives from which man obeys ethical commands, and on what grounds these commands are valid."

These few references to the contents of the present work will give a better suggestion of the author's real achievement than anything we could say in its praise. We can only hope that it will receive wide acceptance wherever

philosophy receives the consideration which it properly deserves, as being the one study to which all other courses should be duly subordinated. The teacher might find help in both the appreciation and exposition of this excellent work of Father Miller's in *Le Primat de l'Intelligence* by O. Habert, which has recently appeared, and which accords excellently with the splendid purpose Father Miller had when thus giving us the generous results of his own careful and exhaustive study.

AUTHOR'S PREFACE

This book presents in a small compass, in simple language, and in a form which facilitates ready assimilation, the principal facts of the history of philosophy. It is intended for serious-minded readers who desire a concise summary omitting no essential material, and for students who require an introduction to the standard works in the history of philosophy and to the sources of which they are systematic and critical expositions. For this reason the text has been made suggestive rather than exhaustive, in the hope of thus stimulating interest in philosophical problems and their history, and of awakening the desire for further information.

But, as history is more than chronicle and facts are more than mere happenings, a touch of the pragmatic method has been introduced throughout the work in order to set the recorded facts in their proper light and their true perspective. In this regard the book is frankly written on Scholastic principles. Although every historian realizes that another generation will pass before an attempt to write the final chapter concerning the formation of Scholasticism can be made, it is better to have a partial solution of the problem and to recognize it as such, than to possess no insight whatever into the genesis of Scholasticism. A special effort has been made to show how the elements which constitute the *Philosophia Perennis* were from the earliest times gradually elaborated and synthesized.

Since history is a science no less than other branches of knowledge, it is greatly to be desired that the student begin at the very outset to verify and to develop from the sources what is merely sketched in this short history. If he is not prepared to take up at once *DIELS'* or similar works, *BAKEWELL'S Source Book in Ancient Philosophy* will stand him in good stead. *GRABMANN AND PELSTER'S Opuscula et Textus*, which are modeled on *LIETZMANN'S* famous *Kleine Texte*, are a promising collection of texts for students of medieval Scholasticism. The works of later philosophers are generally available.

A word must be added concerning the bibliographies, which were mostly selected from foreign languages. The books contained in the four selected lists at the head of each part and in Section 202 of this history were chosen for their utility to its prospective readers. Some of the sources utilized in its making were omitted from these lists, because they were not judged suitable for any but mature scholars. Science has no national character, and does not know the restrictions of language. One of the most indispensable tools of the student of history is the mastery of a sufficient number of ancient and modern languages. Lacking this equipment, he would forever be in the thrall of the interpreters of history and unable to form an intelligent and reasoned opinion on the facts. No one can aspire to citizenship, or even to any considerable measure of hospitality in the world of science, without a knowledge of foreign languages and the capacity for sustained abstract thought.

Finally, I have drawn freely upon the standard works in the history of philosophy, but the experienced reader will observe that I have not been remiss in consulting the sources, in so far as it is possible in this vast domain and in so far as my resources permitted, and that I have formed my own judgment from them. Biographical notes, dates, place-names, etc., have been carefully and critically gath-

ered from the works of such recognized specialists in this field as ZELLER, GRABMANN and others (see bibliographies and notes). However, it may not be superfluous to remark that in ancient and medieval philosophy chronological data are frequently matters of conjecture.

I am indebted to the Rev. Henry J. Heck for a careful reading of the proofs.

LEO F. MILLER.

COLUMBUS, OHIO,
February, 1927.

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A HISTORY OF PHILOSOPHY

GENERAL INTRODUCTION

FUNDAMENTAL CONCEPTS

1. DEFINITION.—The history of philosophy is the scientific exposition of the development of philosophical thought in the history of mankind.

METHOD.—The method followed in the history of philosophy is the *a posteriori* method, showing by authentic evidence the development of philosophic thought.

SCOPE.—The scope of the history of philosophy is: (1) the collection of testimony by which the doctrines of philosophers are established (*empiric method*); (2) the critical study of this testimony in order to determine its authenticity and import (*critical method*); (3) the systematic exposition and critique of the doctrines thus established. The function of philosophical criticism is: (1) to show the connection of a given system of philosophy with the systems that preceded it, to exhibit its structure and characteristics, and to point out the philosophical progress it evidences; (2) to examine and appraise it according to the immutable standards of truth.

USE.—The history of philosophy is a useful study, because it acquaints us with an important phase of the intellectual life of mankind. Philosophy and religion are the key to the dominating tendencies of every age. The history of philosophy stimulates interest in philosophical problems, aids in solving them, and adds firmness to theoretical proofs. Finally, it is an integral part of modern culture.

SOURCES.—The writings of the philosophers are the primary sources of the history of philosophy; the testimony of other writers about them constitutes its secondary sources.

GENERAL DIVISION.—The history of philosophy is divided into four great periods:

I. *Greek Philosophy*, extending from the sixth century before Christ to the sixth century of the Christian era;

II. *Patristic Philosophy*, beginning in the second and ending in the sixth century of the Christian era;

III. *Medieval Philosophy*, beginning in the ninth and continuing until the fifteenth century;

IV. *Modern Philosophy*, extending from the sixteenth century onwards.

Part I

GREEK PHILOSOPHY

INTRODUCTION

2. The Origin of Greek Philosophy.—God endowed the first man with the knowledge necessary to the head of the human race.¹ In the course of time this knowledge was largely intermingled with errors and in part lost. Thus, it happened that men were obliged to search out again by laborious efforts extending over many centuries some of the most vital truths regarding every phase of human existence.

We are indebted to the Greeks for a large part of the philosophical knowledge thus acquired. The Oriental peoples were in possession of an aggregate of philosophical truths bound up with religious myths and lacking scientific proof. Confucianism, Brahmanism, Buddhism, and Zoroastrianism are examples of Oriental religious systems containing a modicum of philosophy. The Hebrews did not systematize the philosophical truths contained in the Old Testament, nor did they prove them with the aid of rational principles. The Western peoples of

¹See W. SCHMIDT, *Die Uroffenbarung als Anfang der Offenbarungen Gottes* (Kempten, 1911).

Northern Europe were without civilization and culture, and were largely given to war. In matters of science, Greece became the teacher of Rome and of the entire world. The natural endowments of the Greeks were superior to those of other nations, the geographical situation of their country favored the study of science, and in Greece the cultivation of the liberal arts was not the restricted privilege of a caste.

The first epoch of Greek thought was mythological, religious truths being interspersed with myths and fables. The poems of Homer and of Hesiod were not likely to kindle philosophical thought, but the Orphic poems, containing doctrines about God and the origin of the world, were apt to stimulate philosophical investigation. The aphorisms of the Wise Men of Greece, bearing upon the practical life of man, mark the transition from fable to philosophy. According to Aristotle, philosophy begins with Thales.

Opinions are still at variance regarding the fact and the extent of the dependence of Greek philosophy on the philosophical thought of other peoples. In general, it may be stated as certain that: (1) there is no proof that the Greeks derived the substance of their philosophy from the sacred books of the Hebrews, although Hebrew influence on Greek philosophy is not *per se* excluded; (2) Greek philosophers nowhere acknowledge the dependence of their philosophy on Oriental sources; (3) in any case, the Greeks received no complete system of philosophy from the Orient, for the development of Greek philosophy is apparent from its history; (4) the Pelasgi, or prehistoric inhabitants of Greece, brought

with them a stock of religious knowledge from the Orient, and the Greek philosophers of a later period may have obtained isolated philosophical truths through contact with the Orient. Generally speaking, however, Greek philosophy is entirely a product of Greek genius.

3. The Sources of the History of Greek Philosophy. — I. *Primary Sources:* DIELS, *Die Fragmente der Vorsokratiker* (Berlin, 1922, reprint of 3rd edition of 1912), is the standard collection of pre-Socratic sources. The principal works of Plato and Aristotle and most of the writings of the later philosophers are extant. Extracts in English translation will be found in BAKEWELL, *Source Book in Ancient Philosophy* (New York, 1907).

II. *Secondary Sources:* — Plato and Aristotle often refer to the doctrines of their predecessors. Aristotle's commentators give the Greek interpretation of his philosophy. DIELS, *Doxographi Græci* (1879), is a reconstruction of the fragments of Theophrastus' history of Greek philosophy before Plato. The *Placita Philosophorum*, written about A.D. 150, is also derived from Theophrastus. DIOGENES LAËRTES, *Vita et Dogmata Eorum Qui in Philosophia Excelluerunt*, is for the most part biographical, and filled with malicious gossip. The principal modern histories of Greek philosophy are: ZELLER, *Die Philosophie der Griechen* (6 vols., 4th–6th eds., 1903–1922); ÜBERWEG, *Grundriss der Geschichte der Philosophie*, Vol. I ed. by PRAECHTER (1920); WINDELBAND, *Geschichte der alten Philosophie* (3rd ed., 1912); JOEL, *Geschichte der antiken Philosophie*, Vol. I (1921); MEYER, *Geschichte der alten Philosophie* (1925); BURNET, *Early Greek Philosophy* (2nd ed.,

1908); *Greek Philosophy*, Vol. I: *Thales to Plato*. Older editions of ZELLER and WINDELBAND have been translated into English.

4. Division of the History of Greek Philosophy.—Taking for 'the principle of division the primary object studied in the course of Greek philosophical thought, the history of Greek philosophy may be divided into three periods:

I. THE COSMOCENTRIC PERIOD, 600–450 B.C., comprising the Ionic, Pythagorean, Eleatic, and Atomistic Schools;

II. THE ANTHROPOCENTRIC PERIOD, 450 B.C.–300 A.D., comprising the Sophists, Socrates, Plato, Aristotle, and minor Schools;

III. THE THEOCENTRIC PERIOD, 1st–6th centuries, comprising the Jewish-Alexandrian and the Neo-Platonic Schools.

CHAPTER I

THE COSMOCENTRIC PERIOD

§ 1. INTRODUCTION

5. Characteristics.—(1) The material cause of the world was the principal philosophical problem studied during this period. (2) Anaxagoras introduced the concept of spirit. (3) Ethical and dialectical problems were only incidentally touched upon.

6. The Philosophical Schools of this Period.—(1) The Early Ionic School in Asia Minor. (2) The Pythagorean School in Southern Italy. (3) The Eleatic School in Southern Italy. (4) The New Ionic School and the Atomists, who flourished in various parts.

§ 2. THE EARLY IONIC SCHOOL

7. General Characteristics.—(1) The philosophers of this school sought the material cause of the world in one of the elements which constitute it, and they believed that all matter is animated. (2) Aristotle chides them for having extended their inquiry only to the material cause of the world, and remarks that they worked on the supposition that only accidental change takes place in the world. (3) The philoso-

phers of this school cannot be regarded as materialists, for they were unacquainted with the distinction of spirit and matter.

8. Principal Representatives. — THALES, ANAXIMANDER, ANAXIMENES, and HERACLITUS are the principal philosophers of this school.

9. Thales of Miletus (624–546 B.C.).—LIFE.—Comparatively little is known of the life of the early Greek philosophers. According to Apollodorus, Thales lived from 624 to 546 B.C. His father was probably a Carian, his mother certainly a Greek. His family belonged to the nobles of their country and were engaged in commerce. His sea voyages directed his mind to the study of the earth and the sky, and brought him into contact with men of science in Egypt. He is said to have foretold the eclipse of the sun which took place on May 28, 585 B.C. Eudemus, a disciple of Aristotle, records that Thales discovered some of the theorems of elementary geometry. Thales probably wrote nothing, for Plato and Aristotle knew nothing of his writings.

10. PHILOSOPHY.—Water, possessing the properties of infinity and life, is the material cause of all things. The earth undergoes a periodical cycle of evolution and devolution. It originates from water, and then reverts to it again. There is no record of the manner in which Thales conceived this process of evolution. Aristotle conjectures that Thales regarded water as the material cause of all things, because he observed that moisture is contained in food, is necessary for vegetal life, and is an all-pervading element in the atmosphere.

11. HISTORICAL POSITION.—Thales is the first philosopher, because he assigned one first cause of all

things. His views are untenable, because water is not an element.

12. Anaximander of Miletus (b. 611; d. 547/6 B.C.).

—LIFE.—Apollodorus records that Anaximander died in 547/6, and others say that he lived to the age of 64 years. He was prominent in the Greek colony in Miletus, and may have been a disciple of Thales. He wrote a treatise *On Nature*, drew a kind of geographical map, and constructed a globe and a sundial.

13. PHILOSOPHY.—The *apeiron* (indeterminate) is the principle of all things. It is qualitatively undetermined and quantitatively unlimited; it is endowed with immortal life. Things originate by differentiation of the *apeiron*: first the elements, then physical bodies by differentiation of the elements. Finally, man evolves from a fish. Anaximander also proposed the cycle of evolution.

14. HISTORICAL POSITION.—Anaximander, probably a pupil of Thales, introduced the concept of the *apeiron* into philosophy. His concept of the first principle is more abstract than that of Thales.

15. Anaximenes of Miletus (b. 6th century B.C.).

—LIFE.—Apollodorus says that Anaximenes was born in the 58th Olympiad (548–545 B.C.); the date of his death is unknown. Of his life we know only that his father was named Eurystratus, and that he was a disciple of Anaximander.

16. PHILOSOPHY.—Air is the first principle of all things. It is endowed with the properties of life and unlimited extension. In proposing the cycle of evolution, Anaximenes says that fire originates from the rarefaction of the air, and physical bodies by its condensation,

17. HISTORICAL POSITION.—Anaximenes introduced the anthropomorphic conception of the world into Greek philosophy; he infers by analogy that the world is animated because man lives. Both are animated by the same principle. He also gives the first detailed account of the evolution of the world from its material cause. His theory is, of course, untenable, for air is not an element.

18. Heraclitus of Ephesus (about 540–470 B.C.).—LIFE.—All ancient authorities agree that Heraclitus was a native of Ephesus. He was a member of a distinguished family, for he renounced the office of *basileus* in favor of his brother. This office was hereditary in character and included both civil and religious powers, especially the direction of the Eleusinian Mysteries. Heraclitus was opposed to the kind of Greek democracy by which Ephesus was governed; hence he was unpopular with his fellow-citizens. About 490 Heraclitus wrote a treatise *On Nature*, of which fragments are extant. These show an original mind struggling for expression in a style which is not only solemn and filled with grandiose imagery, but also disjointed, sarcastic, and obscure. In ancient times the obscurity of his diction already earned for Heraclitus the nickname of “The Obscure Philosopher,” and for his melancholy temperament he was dubbed “The Weeping Philosopher.” Aristotle groups Heraclitus with the school of Miletus.

19. PHILOSOPHY.—(A) *The World*.—Fire is the first principle of all things. It is endowed with life and exceedingly great mutability (“all things flow”). The world evolves from fire by the conflict of different parts (cycle of evolution). (B) *God*.—

God is the *Logos* and identical with fire. There is order in the evolution of the world, because God is the *Logos*. (C) *The Soul*.—The soul is a part of the divine fire. Personal immortality is contrary to the principles of Heraclitus, because the soul becomes and ceases by change. (D) *Logic and Ethics*.—The testimony of the senses is untrustworthy. We must obey the laws.

20. HISTORICAL POSITION.—The completeness of his system puts Heraclitus above his predecessors. His explanation of change is unsatisfactory, because he does not attend sufficiently to the material cause (that which remains when change takes place). Modern science confirms his assertion that all things are constantly in motion ("all things flow"). According to Heraclitus, God is the world-soul, not a personal being. Heraclitus introduced the *Logos* doctrine into philosophy. In his view, the *Logos* is a rational intrinsic constituent and movement of things, and the rationality of the general process of evolution. It remained for Anaxagoras to distinguish the *Logos* from the world. The sceptic attitude of Heraclitus led his successors to a closer study of sense cognition. The doctrine that "all things flow" (or change), brought about a detailed investigation of change, and was one of the causes which led Plato to formulate the doctrine of the Ideas. Aristotle accepted Heraclitus' principle that change is a process by which one opposite becomes another (*mutatio fit ex opposito in oppositum*).

21. Retrospect.—The Early Ionic philosophers studied a true philosophical problem (the material cause of the world) in a philosophical manner (searching for one first cause). Their philosophy

is characterized by youthful spontaneity and inexperience of thought, and has become the pattern of many systems of the present day (such as materialism, panpsychism, pantheism, and evolutionism). The general lack of speculative thought and the failure to utilize the speculative ideas contained in the myths and old theologies of the Greeks are to be rated as defects of the Early Ionic School.

§ 3. THE PYTHAGOREAN SCHOOL

22. General Characteristics.—The Pythagoreans studied the constituent principles of the external world, explained all things by mathematical principles, and failed to give to their religious and scientific doctrines a scientific foundation.

23. Pythagoras of Samos (about 572–497 B.C.).—**LIFE.**—The personal history of Pythagoras is so interwoven with legendary matter that it is difficult to distinguish fact from fable. The years of his birth and death are matters of conjecture. The most reliable ancient writers agree that Pythagoras was born on the Island of Samos. He wrote nothing. The so-called *Golden Sayings of Pythagoras* are a Hellenistic forgery. There is no credible evidence of the various journeys which Pythagoras is said to have undertaken in the quest of knowledge. His doctrines were undoubtedly developed in his native city, because they were known in Samos shortly after his death, at a time when they could not have been brought there from Italy. Probably because of a lack of success or because of an unfriendly government, Pythagoras emigrated from Samos to the Dorian colony of Crotona in Southern Italy. Here

he quickly acquired great fame and influence. As Pythagoras was not only a philosopher, but also a moral and political reformer, he organized his followers into a community, and became the typical representative of the Dorian aristocracy. This attitude became fatal to the Pythagorean community, because the democratic form of government was spreading through the Greek colonies. This caused Pythagoras to leave Crotona and to spend the last years of his life in Metapontum, and it ultimately resulted in the destruction of the Pythagorean community and of its property. Besides philosophy, Pythagoras and his school cultivated mathematics and physics with extraordinary success.

24. PHILOSOPHY.—(A) *Number.*—Number is the intrinsic constituent of bodies. Pythagoras was led to adopt this view probably because he observed that all phenomena, especially sounds and the heavenly bodies, possess numerical relations. He may have been influenced by the ancient Greek doctrine, as it appears in various mystery cults, that numbers have an occult power and meaning. (B) *The Universe.*—Pythagoras offers no explanation of the origin of the primordial fire and matter, nor does he assert that they are eternal. The primordial fire is in the center of the primordial matter. It attracts particles of this matter, and thus the planets are gradually formed. The planets, including the sun, revolve about this central fire. Their motion is the music of the spheres. There are ten planets, all moving from west to east. The stars are fixed in transparent spheres, and they are moved by the revolution of these spheres upon their axes. (C) *Man.*—The soul is a number. The brain is the seat

of reason, the heart that of life and sensation. Pythagoras teaches the punitive union of soul and body: because the soul is laden with guilt, God has imprisoned it in the body. Hence suicide is forbidden by God. If the soul leads a good life during the time of our mortal existence, it will be transferred to a higher world after death, and there live on without a body. But, if the soul leads an unworthy life while it is imprisoned in the body, it will be punished in Tartarus after death, or become incarnate again in a human or in an animal body (metempsychosis). (D) *Demons*.—The demons are souls without bodies. They live under the earth and in the air. They appear frequently to men and communicate revelations and prophetic knowledge to them. (E) *God*.—The One is the principle of all things. Pythagoras and his followers did not reject the popular Greek polytheism. Despite their vague conception of the deity, the Pythagoreans attached the greatest importance to religion. (F) *Ethics*.—The life of man is under the protection of the deity. The purification of the soul is the purpose of life; hence no one may take his own life. Obedience to the deity is the fundamental ethical law. Later accounts of the Pythagorean ethics stress the necessity of self-study, sobriety and integrity of life, love for one's country, and obedience to its laws.

25. HISTORICAL POSITION.—(A) It is sometimes impossible to distinguish Pythagoras' own contributions to philosophy from the material on which he built up his teaching and from the additions of the Pythagorean School. (B) The thesis that number is the essence of all things is the fundamental error of the Pythagorean philosophy. (C) Pythagoras

had no concept of spirit. (D) His most valuable contribution to philosophy consists in his recognition of the adaptedness of man for a virtuous life and for the study of science. (E) The doctrine of the punitive union of soul and body, of metempsychosis, and of the mathematical nature of bodies is found again in Plato. The philosophy of Empedocles is a rudimentary Pythagoreanism; the atomism of Leucippus and Democritus is a degeneration of Pythagoreanism. The mathematical basis of these systems proves their dependence on Pythagoras.¹

26. The Pythagoreans.—Political conflicts caused the dispersion of the Dorian colony in Sicily about 440 B.C. The followers of Pythagoras made little progress in philosophy, but they advocated advanced scientific theories. HIPPASUS (about 450 B.C.) attempted to reconcile the philosophy of Pythagoras with that of Heraclitus. HICETAS² and others maintained the revolution of the earth on its own axis. ALCMÆON (6th century B.C.) already regarded the brain as the central organ of sensation.

§ 4. THE ELEATIC SCHOOL

27. General Characteristics.—(1) The Eleatic philosophers studied the nature of the objects which constitute the external world. (2) They taught that the world is a single immovable and unchangeable being. They did not distinguish God from the world.

¹ The interpretation given in the text is the common and literal understanding of the philosophy of Pythagoras. The symbolic interpretation (as given, e.g., by WILLMANN, *Geschichte des Idealismus*, I, 2nd ed., 266-350) is considered by some historians as the correct explanation of the system in itself and also of its influence on Plato.

² See BARRY, *Short History of Astronomy*, pp. 25 sq.

They regarded sense cognition as untrustworthy, because it represents the world as constituted of many objects, which are subject to change. (3) The Eleatic School of philosophers seems to have originated from the Early Ionic School, for Theophrastus says that Xenophanes was a pupil of Anaximander.

28. Members.—XENOPHANES, the founder of this School, was born in Asia Minor, the home of the Early Ionic School. PARMENIDES, ZENO THE ELEAT, and MELISSUS, the other members of this School, flourished in Elea in Southern Italy.

29. Xenophanes of Colophon (b. about 570; d. 5th century B.C.).—LIFE.—Theophrastus records that Xenophanes was a pupil of Anaximander, and Heraclitus terms him a man of great and varied learning. After the conquest of the Greeks in Asia Minor by Cyrus, Xenophanes left his native country, travelled through Greece, reciting his poems after the manner of the rhapsodists of his time, and finally settled in Elea. He laid down his philosophical views in a poem toward the close of his life. A later generation gave it the title, *On Nature*.

30. PHILOSOPHY.—(A) The world is one being, because God is one and identical with it. The world has not become, for nothing becomes out of nothing (*ex nihilo nihil fit*). The parts of the world are subject to change. (B) God is identical with the universe. There is only one God, for He is a perfect and independent being. God is all intelligence. By means of His intellect He moves all things without effort. God is not subject to local motion. (C) It is impossible to obtain certain knowledge about God and the nature of things.

31. HISTORICAL POSITION. — (A) Xenophanes' teaching about the unity and immutability of the universe is vague. (B) His God is the world-soul, not a personal being distinct from the world. The attributes of God as described by Xenophanes mark a new departure in Greek philosophy: God is one, because He is perfect; the *whole* of Him knows, sees, and hears; without effort He rules all things by the power of His mind. These attributes of God later found their place in Christian theology. The inference of the unicity of God from His perfection is a profound metaphysical deduction. (C) Xenophanes' estimate of the value of human knowledge is sceptical.

32. Parmenides of Elea (b. about 515/510 B.C.).—**LIFE.**—Parmenides was the scion of a wealthy and distinguished family. For many years he was the associate and pupil of Xenophanes. His philosophy is contained in a poem, of which fragments are extant, and to which various titles were given in ancient times. All ancient writers are agreed as to the noble personal character of Parmenides.

33. PHILOSOPHY.—(A) *The Universe is One Being.* Parmenides was the first to formulate the principle of identity: whatever is, is being. Nothing can neither exist nor be thought. Since all things which are, are being, they form a logical unit; therefore, also, they are ontologically one. This one and only being is an extended and homogeneous *continuum*. (B) *The Immutability of the Universe.* Being did not become, for nothing becomes out of nothing. Being is indestructible, indivisible, and not subject to local motion. (C) *Other Properties of the One Immutable Being.* Since being is immutable, it is

eternal. It is identical with God, for there is only one being. It is finite in extent and spherical in form. (D) *The Evidence of Sense Cognition*, testifying to the mutability and plurality of things, is false. For, if there were many beings, their opposite properties would require two first principles of opposite characteristics, being and not-being; now not-being can neither exist nor be thought.

34. HISTORICAL POSITION.—(A) The philosophy of Parmenides may be characterized as *dialectical monism*. A keen and venturesome thinker, he built up his entire philosophy on the concept of being. (B) *Fundamental Errors*. Parmenides confuses the logical with the ontological order; he fails to distinguish the various senses of the terms “being” and “not-being”; and he has no concept of spirit. (C) *Merits and Influence*. Parmenides is the principal philosopher of the Eleatic School. Plato termed him “the Great,” and dedicated one of his dialogues to him. Parmenides agrees with his teacher Xenophanes in identifying God with the world-soul, yet the attributes which he ascribes to the world-soul are proper to the *ens a se*. He maintains that the world-soul is “void of any beginning, without any ceasing, same in the same, self through self, birthless and deathless, whole and only-begotten, moveless and ever-enduring” (*On Nature*, lines 56-60, 85-88). The words, “Never it was or shall be, but all simultaneously now is” (line 61), convey a profound and clear concept of eternity akin to St. Augustine’s description, *nunc stans*. Parmenides’ sceptical attitude toward sense experience occasioned a detailed study of the veracity of the senses.

The atomists applied his concept of "immutable being" to atoms.

35. Zeno the Eleat (b. 490/485 B.C.).—LIFE.—Zeno was the favorite pupil of Parmenides. He spent his efforts in elaborating proofs of the doctrines of his master. Zeno was active in political life, and, in a conspiracy with which he may have had no connection, he was taken prisoner. His captors vainly sought to elicit information from him under torture, and finally put him to death. Like others of the early Greek philosophers, he is credited with a treatise *On Nature*, but the number and titles of his writings are doubtful. The biographical data given by Plato in the dialogue entitled *Parmenides* are not considered authentic.

36. PHILOSOPHY. — Zeno's principal dialectical theses and proofs are the following: (A) *The Universe is One Being*. For, if there were several beings, these contradictions would follow: (1) These beings would be at the same time infinitely great and infinitely small. They would be infinitely great; for, as each object is infinitely divisible, it is composed of an infinite number of parts. Now, since each of these parts possesses extension, their total extension constitutes an infinite magnitude. Yet, each of these objects would also be infinitely small, for each of them would, in the hypothesis under consideration, be a true unit, and consequently be indivisible. Now, since everything possessing extension is divisible, these objects would by reason of their indivisibility be devoid of extension, that is, they would be infinitely small. (2) These beings would be finite and infinite in number. They would be finite, be-

cause each is what it is, and no more. They would be infinite, because, if two objects are distinct, they are separated by something. This again must be separated from each of them by another object, the latter by still another, and so forth to infinity. (3) There would be an infinite number of spaces, for each of these beings would be in space. Now if objects are in space, space also is in space, and this space again in still another space, and so forth to infinity. Because there cannot be an infinite number of spaces, the hypothesis which postulates them is false. Hence there is only one being. (4) A single grain of wheat, when it falls to the ground, would produce and not produce a sound. When a container of wheat is poured out, the grains produce a sound as they fall to the ground. But, if each grain is dropped separately, it produces no sound. Hence we have the contradiction of an effect produced and not produced in the same hypothesis, for the grains of wheat, when they fall together to the ground, cannot produce an effect which they do not severally produce.

(B) *Local Motion is Impossible*. Proofs: (1) It is impossible to pass through a given space (the argument from dichotomy). If a body is to pass from one end of a given space to the other end, it must first pass through the middle of this space; previous to this it must pass through the middle of the first half of this space, and previous to this it must pass through the middle of the first quarter, and so forth to infinity. Hence in order to pass from one point to another, a body must pass through an infinite number of spaces. Now it is impossible to traverse infinity in a given time. It is therefore impossible

to go from one point to another: local motion is impossible. (2) It is impossible to traverse a space which has moveable boundaries (Achilles and the turtle). Achilles could not overtake the turtle for the same reasons as those given in the first argument. (3) Only an infinitely small amount of movement takes place in any instant (the immoveable arrow). An arrow in flight is in the same space during every instant of its flight; hence it is at rest during its entire flight. Its motion is only apparent. (4) Local motion is an illusion, because it is relative. According to the laws of motion two bodies moving with the same velocity traverse the same space in the same time. Now, when they move toward each other, they pass each other as quickly again as they do when one of them is stationary and the other moving toward it. Hence local motion is an illusion.

37. HISTORICAL POSITION.—Zeno's arguments show that his was a keen and subtle intellect. He clearly understood and stated the extraordinary difficulties of the problem of the *continuum*. He furthered the study of the *continuum*, of indirect argumentation, and of the veracity of sense experience. His subtle sophistry contributed much toward the rise of the sophists.

38. Melissus of Samos (5th century B.C.).—**LIFE.**—Melissus was a pupil of Parmenides. He was also a statesman and the commander of the Samian fleet which defeated the Athenians in 442. Nothing further is known of his career, nor has the title of his philosophical treatise come down to us.

39. PHILOSOPHY.—Melissus defended the philosophy of Parmenides by means of new arguments. His principal theses are: (A) *The Universe is One Being.*

Melissus proves this fundamental doctrine of Parmenides by the infinity of the universe, the non-existence of the vacuum, and the impossibility of change. The world is eternal, because nothing becomes from nothing. The world is infinite, because an eternal being is necessarily infinite. Furthermore, a finite world would be limited by a vacuum, and a vacuum cannot exist; hence again, the world is infinite. All the universe is only one being, for the vacuum, which is the only means of delimiting one being from others, cannot exist. A vacuum cannot exist, because it would be not-being, which cannot exist. In addition, the universe is only one single being, because the many beings which our sense-evidence seems to manifest to us, become and cease according to the testimony of the same sense-evidence; now this is an illusion, for being is necessarily eternal.

(B) *The Universe Excludes All Change*, for being is necessarily eternal. Local motion is impossible, because it presupposes a vacuum into which a body moves; but a vacuum cannot exist. Melissus seems to contradict his own theory of the impossibility of motion by admitting that one part of the universe can move into the place previously occupied by another part in so far as this can be accomplished without postulating a vacuum.

40. HISTORICAL POSITION.—Generally speaking, the reasoning of Melissus has the same defects as that of Parmenides. With the exception of his doctrine of the infinite universe and of the possibility of such motion as does not involve a vacuum, Melissus agrees with his teacher Parmenides. Parmenides maintained the monistic unity of the universe on

the ground that all things are being; Melissus asserts it for the reason that the universe is a *continuum*, and that a vacuum is impossible. Melissus introduced the study of the vacuum into philosophy. He identified it with the not-being of Parmenides, whence he also inferred that a vacuum cannot exist. From this in turn he deduced the infinity of the world.

41. Retrospect.—The Eleats are true philosophers, because they studied the ultimate intrinsic constituents of things; but their theories exaggerate the unity and immutability of the world. Xenophanes deduced these properties from the unity of God; Parmenides inferred them from the concept of being. Zeno sustained the position of his master by means of direct arguments, Melissus by means of indirect arguments. The Pythagoreans studied the external world from the mathematical point of view; the Eleats studied it from the metaphysical aspect. The Eleatic School developed a certain polemical tendency throughout. This School preformed the concept of God by stating the attributes of God. Its extensive study of change exercised a profound influence on the later Nature Philosophers.

§ 5. THE NEW IONIC SCHOOL

42. General Characteristics.—(1) Since the Eleatic and Pythagorean philosophies were incapable of further development, the philosophers of the New Ionic School naturally reverted to the theories of the Early Ionic School, which had not been fully developed by their originators. (2) The New Ionic

School studied the material cause of the objects which constitute the external world. Their doctrines differed from those of the Early Ionic philosophers in maintaining that there are several ultimate elements. They shared the Eleatic view that there is no true becoming, and explained all things by the mechanical combination of atoms. (3) Inquiring into the cause of the new combination of atoms, the New Ionic philosophers introduced the important concept of the efficient cause into Greek philosophy. Matter, they said, does not cause them. Empedocles assigned mythical forces as their cause; Anaxagoras, an extramundane intellect; Democritus, blind necessity.

The New Ionic School is not associated with a single city, like the Miletian and the Eleatic Schools: EMPEDOCLES flourished at Agrigentum in Sicily; ANAXAGORAS at Clazomenæ in Asia Minor; and DEMOCRITUS at Abdera in Thrace.

43. Empedocles of Agrigentum (about 490–430 B.C.).—LIFE.—The eloquence of Empedocles was the ladder on which he ascended to fame and political power. He brought about the restoration of the democratic form of government in Agrigentum, but the inconstancy of popular favor compelled him to remove to the Peloponnesus, where he spent the last years of his life. Aristotle terms him the “founder of Rhetoric,” and Gorgias the Sophist is said to have been his pupil. Empedocles surrounded himself with pomp and dignity, and was regarded by the people as a priest and prophet. His medical skill increased his fame as a scientist. Empedocles wrote several philosophical treatises, the principal one of which bears the title, *On Nature*.

44. PHILOSOPHY.—(A) *The Ultimate Elements of Bodies.*—(1) Empedocles attempted to reconcile the dialectical monism of the Eleatic School with the commonsense view of becoming by the theory that there is no true becoming, and that change is the local motion and mechanical combination of atoms. (2) Earth, air, fire, and water are the ultimate elements of bodies. These elements are essentially unchangeable, qualitatively different, and indefinitely divisible. (3) Love and strife are the principles of the movement of the atoms.

(B) *The Cycle of Evolution.*—There are four stages in the cycle of evolution: the perfect union of the elements is the non-existence of the world; this is followed by the phase of increasing separation under the influence of strife; this phase in its turn is succeeded by the reign of strife, or the state of the complete separation of all the elements; finally, the world evolves by the gradual union of the elements in friendship.

(C) *Living Beings.*—Living beings originated from the earth by spontaneous generation. Empedocles does not distinguish clearly between living and non-living matter. Empedocles' theory of knowledge is that we know objects by corresponding elements in ourselves (like knows like; effluvia). Certain doctrines of Empedocles are in contradiction with his system (*e.g.*, the pre-existence and migration of souls, and the inference that it is wrong to kill animals). The doctrine of the Golden Age contradicts the theory of the two forces.

(D) *God.*—The only doctrine of God which is in harmony with the principles of the system of Empedocles is his teaching that the gods, like other

beings, are composed of the four elements. Empedocles accepts the current polytheism in so far as he adapts himself to the popular manner of thought and of expression. But his description of Apollo contains a doctrine about God, which is not inferior to the theology of his predecessors. Apollo is imperceptible by the senses, has no human body, and knows the world. In describing God as a being that is distinct from matter and endowed with properties opposed to it, Empedocles may have had a primitive concept of spirit: God "is only mind, sacred and ineffable mind, flashing through the whole universe with swift thoughts" (Frag. 134).

45. HISTORICAL POSITION.—(A) Empedocles set himself a difficult task, devised an ingenious theory to accomplish it, and in part successfully achieved his aim. The atomic theory is a clever expedient to reconcile the dialectical monism of the Eleatic School with the plurality of objects and a certain degree of change. (B) The doctrine of the Empedoclean elements held the field until the rise of the exact sciences in modern times. The research of a later age has long since disproved it, together with the grossly anthropomorphic theory of the two forces. (C) Empedocles introduced the important concepts of the element and of the efficient cause into philosophy, and prepared the distinction of matter and spirit. He ranks among the ablest of the pre-Socratic philosophers. The atomic theory has been often revamped in various guises and supported with much seeming weight of evidence.

46. Anaxagoras of Clazomenæ (about 500–428 B.C.).—**LIFE.**—Anaxagoras lived in Athens during the golden age of Pericles, whose friend he was. It

was the age of the great Greek dramatists and of Herodotus, the historian. Shortly before the Peloponnesian war, when the enemies of Pericles sought to overthrow him, they attacked him also through his friends. Anaxagoras had been unpopular with the people, because he rejected the gods of Greece. When the crisis in the political career of Pericles approached, he was not able to keep his friend safely in Athens. So Anaxagoras retired to Lampsacus, where he died about the year 428. Considerable fragments of his writings are extant.

47. PHILOSOPHY.—(A) *The Elements and the Primitive State of Bodies*.—(1) There is neither true becoming nor ceasing to be. The universe consists of many objects, which undergo change only in the sense of union and separation. (2) The elements are infinite in number, different and unchangeable in nature, and indefinitely divisible. Each body contains all elements. In the beginning all the elements were resolved into their smallest particles and equally distributed in space.

(B) *The Intellect as the Mover of the Universe and the Source of its Order*.—(1) An Intellect distinct from matter is the only sufficient reason of movement in general, and particularly of the movement of the stars and of the order which is apparent in the universe. (2) Nature of the Intellect. The Intellect knows all things which take place, because it moves their causes. By its power the Intellect puts all things into order. It controls its own motion by which it effects the order in the universe. It knows all bodies, because it moves them and puts them into order. The Intellect exists for itself and in itself; it does not enter into anything as a part

thereof. The Intellect is simple, infinite, and one in number. It is impassive and immutable. (3) The Intellect is really distinct from all other intellects and superior to them. (4) Anaxagoras does not explicitly affirm the personality of the Intellect, but this follows from his statements that it has free will and reflex consciousness, and is analogous with man.

(C) *The Formation of the World by the Intellect.*

—(1) Finding the elements present in the state of a perfect mechanical mixture, the Intellect put them into rotary motion and thus formed the universe. (2) Anaxagoras refers to the progressive evolution of the universe, which is to continue; but he says nothing about periodic evolution and devolution. (3) He is silent regarding the ends which the Intellect desires to attain through the order of the universe.

(D) *Living Beings.*—(1) All living beings, including plants, are animated by an intellect. (2) Plant seeds fell from the air into the water, and were there united with their intellect. Plants have cognition, appetite, pleasure, and pain. (3) Animals originated approximately like plants, and have a very limited sense cognition. (4) Sensation and intellection are the cognitional processes of man, but Anaxagoras does not state that they are specifically different. Intellection depends on the sense organ, but no statement is made as to the manner in which objects determine the intellect to posit the act of intellection. The simplicity and spirituality of the intellect follow from the principles of Anaxagoras, but he does not mention personal immortality. The acquisition of knowledge is an end of man,

(E) *God*.—(1) There exists an Intellect, which is distinct from the universe, and is the cause of its order and of the events which take place in it. The statement of Cicero, Sextus Empiricus, Stobæus, and Themistius, that Anaxagoras termed the Intellect (*Nous*) God (*Theos*), cannot be verified from the extant fragments. (2) The Intellect is simple, spiritual, and endowed with free will, knowledge, and personality.

48. HISTORICAL POSITION.—(A) The philosophy of nature proposed by Anaxagoras is untenable. (B) The theory that the universe evolved, and that the regular movement of the stars and planets continues in virtue of a single initial impulse, which it received from God, is an anticipation of the nebular hypothesis (Newton, Kant, Laplace). (C) Anaxagoras is the first theist. For the first time in Greek philosophy, he affirms the spirituality and the transcendence of God. His proofs of the existence of God are tenable. His doctrine about God as the prime mover and the source of the order in the universe was accepted by Socratic and by Christian philosophy. (D) The philosophy of Anaxagoras is a great step forward in Greek philosophy. He has overcome the materialistic, pantheistic, atheistic, and polytheistic views of his predecessors, and laid the foundation of true philosophy by the statement that the intellect alone is the cause of order. Socrates took up this principle with enthusiasm. Plato and Aristotle built upon the foundation of Anaxagoras. He discovered the only true method of proving the existence and nature of God. His theses, his arguments, his very terms constitute the central part of Christian philosophy.

49. Leucippus and Democritus (5th century B.C.).

—LIFE.—So little is known about Leucippus that even in ancient times his very existence was doubted. Democritus was a pupil of Leucippus, whose philosophy he developed. Their philosophy centers about the ultimate principles of the material world, and the manner in which the world was formed.

50. PHILOSOPHY.—(A) *The Ultimate Elements of Bodies.*—(1) These philosophers attempt to reconcile the Eleatic doctrine of the unity and immutability of the universe with the data of sense-experience testifying to the plurality of things, by denying true becoming and cessation of being and admitting only the local motion of atoms. (2) The full (that is, the atoms) and the void (that is, the space between atoms), which is being, are the ultimate principles of bodies. All atoms are homogeneous, unbecome, and immutable. They differ in shape and size. (3) All bodies are specifically identical. The becoming, desition, and accidental change of bodies consist in the union and the separation of their constituent atoms. Bodies act upon each other by the contact of their atoms, or by effluvia proceeding from atoms when they are in contact with each other. The secondary sense qualities are only causally objective.

(B) *The Formation of the Universe.*—(1) By an intrinsic necessity of their nature, the atoms were in a state of downward movement. (2) Vortices were formed in the course of this movement, and thus atoms of the same weight were united and formed into an infinite number of worlds.

(C) *Psychology.*—(1) All living beings originated from the moist earth in virtue of the same necessity by which the world was formed. (2) The human

soul is a complex of fire-atoms. It is present in every part of the body as a network of fire-atoms interspersed with body-atoms. Since the fire-atoms are the most mobile of all atoms, the other atoms are constantly expelling them from the body. Life continues because, in respiration, we are constantly breathing in fire-atoms. When the body becomes incapable of doing this, the soul gradually leaves it by the constant breathing-out of fire-atoms. This explains why death is gradual, and why a person who is apparently dead may still be alive. Despite its errors, this theory is evidence of careful thought. (3) Sensation consists in the local movement of fire-atoms. It originates by *effluvia*, or *eidola* (images, ideas), passing from objects into the senses. The existence and sense-properties of bodies are the object of sense-cognition. Intellection is a material process, which originates in a manner similar to sense-cognition. (4) The will is not free, for all becoming is necessary. The soul is not immortal, for the fire-atoms separate. Beatitude, which is the end of man, is attained through knowledge and a virtuous life.

(D) *God*.—In a loose and ill-defined sense Democritus terms nature and fire divine. He regards the gods of Greek mythology as creatures of the imagination. In more definite terms Democritus speaks of gods who are superhuman beings, constituted of atoms, living in the air, and in dreams revealing themselves and future things to men. These gods seem to be identical with the demons of the popular Greek mind.

51. HISTORICAL POSITION.—(A) *General Criticism*.—The philosophy of Democritus and Leucippus is

formal atheism and materialism. It offers no sufficient reason for the infinite number, eternal existence, and constant movement of the atoms. It does not account for the origin of organic and inorganic matter, nor for the order apparent in the world. It does not explain the phenomena of life, and it provides no foundation for ethics.

(B) *Atomism*.—Democritus introduced the concept of the atom into philosophy, and his system is mechanical atomism. Though the atomic constitution of matter is generally accepted today, Democritus, of course, has not the present-day scientific conception of atoms. His proofs of the indivisibility of the atoms are not valid. Neither atoms without active powers, nor atoms endowed with gravity alone, in the sense of Democritus, can explain all the phenomena of the inorganic world (*e.g.*, chemical affinity).

(C) *Coherence*.—The coherence of the system of Democritus is remarkable, and he deserves the praise which Aristotle bestows upon him for extending his investigations into all fields of scientific research.

(D) *Progress*.—The philosophy of Democritus shows progress over that of his predecessors in the doctrine of the downward tendency of all bodies, which may possibly be interpreted as a crude conception of gravity, of the homogeneity of the matter of the earth and of the stars, and of the existence of other worlds. Democritus is the father of philosophical atomism and materialism.

52. Retrospect.—The philosophers of the New Ionic School attempted to solve the problem of the origin, plurality, and apparent change of bodies on

the supposition of the central doctrine of the Eleats that bodies are intrinsically unchangeable. All the New Ionic philosophers accepted the atomic constitution of matter, but they differed with regard to the ultimate elements of bodies and the medium which unites them to constitute physical bodies. Empedocles held that there are four kinds of elements; Anaxagoras maintained that there are an infinite number; Democritus was content with one kind. Empedocles asserted that they are united by the mythical forces of love and strife; Anaxagoras, by the transcendent Intellect (*Nous*); Democritus, by the force of gravity. Empedocles prepared the dualism of the corporeal world, and the cause which introduces order into it; Anaxagoras systematized this view for the first time. Democritus attacked this dualism and substituted materialistic monism for it. Anaxagoras is the father of theism, Democritus of atheism. All the philosophers of the New Ionic School were able thinkers.

CHAPTER II

THE ANTHROPOCENTRIC PERIOD

53. General Characteristics.—The philosophers of this period studied principally the nature, activities, and purpose of man. Their epistemological point of view is dogmatic. The philosophy of this period is dominated by three great individuals, Socrates, Plato, and Aristotle, rather than by Schools. The Sophists mark the transition from the cosmological to the anthropological point of view in Greek philosophy.

§ 1. THE SOPHISTS

54. The Sophists, who ushered in the second period of Greek philosophy, were professional teachers of “wisdom” (*sophia*), *i.e.*, of practical philosophy and of its exposition as the arts of dialectic and rhetoric.

55. ORIGIN.—The inconsistency, divergence, and incompleteness of the philosophies of the cosmocentric period were the philosophical cause of sophism; the flourishing condition of the arts and the opulence of Greece in the age of Pericles were its cultural cause; the practical advantages of a knowledge of dialectics and rhetoric were its immediate causes.

56. CHARACTERISTICS.—The Sophists are charac-

terized by extensive theoretical scepticism with regard to the possibility of scientific certainty; by practical scepticism in ethics, denying the immutability of ethical standards; and finally, by extensive quibbling.

57. OPPONENTS.—Socrates, Plato, and Aristotle were the leading opponents of the Sophists. Socrates was accustomed to contend with them in argument. Plato opposes them strongly in his earlier dialogues. The lessening of his opposition against them in his later dialogues suggests the inference that their influence was waning when these dialogues were written. Aristotle's attitude toward the Sophists shows that their influence had spent itself before his time.

58. Theoretical Scepticism. — (A) PROTAGORAS (about 481–411 B.C.), a friend of Pericles, was the first Sophist and the founder of scepticism. He set up the principle that “man is the measure of all things, of the existence of the things which are, and of the non-existence of the things which are not” (Plato, *Theætetus*, 152A). This principle means that the individual is the criterion of the truth of his cognition: his own feelings and desires are the only test of what is true. Protagoras is an individualist. Born in Abdera, he spent many years in Athens until the accusation of “atheism” (the rejection of the gods of Greece) forced him to depart. He died on the way to Sicily. The government of Athens had already ordered his writings to be burnt.¹

(B) GORGIAS (about 480–380 B.C.) was born at Leontini in Sicily. At first he was a follower of Empedocles, but later he reverted to the doctrines of

¹ For a list of the works of Protagoras see ZELLER, Vol. I, part 2, p. 1303.

the Eleatic School and developed his scepticism from their doctrines. His countrymen sent him at the head of an embassy to Greece to obtain the protection of Athens against Syracuse (427 B.C.). His oratory charmed the Athenians, and he settled in Athens as a teacher of rhetoric. In his travels about Greece as a Sophist he collected large fees. Toward the close of his unusually long life, he retired to Larissa in Thessaly. Gorgias taught that nothing exists; that, if anything were to exist, it would be unknowable; and that, even granting the existence and knowableness of objects, the knowledge of them could not be communicated to other persons. For, so Gorgias reasons, I perceive color and communicate my perception to others by speech. Now color cannot be heard; and, even if it could be heard, the object of my perception would be in my mind and also in that of my interlocutor. Therefore, the object of my perception would be separated from itself, which is contradictory. Hence nothing exists. Gorgias is a nihilist.

59. Ethical Scepticism.—The first Sophists were inconsequent in limiting their scepticism to speculative science; for, if there is no objective truth, there can be no objective principles of morality. The later Sophists adopted the extreme position that “law is the tyrant of mankind” (HIPPIAS in Plato’s *Protagoras*, 337), and that “justice is the interest of the stronger” (THRASYMACHUS in Plato’s *Republic*, 334).

60. Historical Position.—(A) The Sophists rightly rejected the philosophical systems of their predecessors as systems; for these contained contradictions, offered no solutions for the problems of the period

of the Sophists, and did not put their fragmentary ethics on a scientific basis. (B) But the Sophists were gravely at fault in limiting themselves to destructive criticism. It was their duty toward science to treasure and acknowledge every element of truth contained in the philosophy of their predecessors, and to spend their strength in broadening the field of scientific knowledge. (C) The Sophist movement was not without good results: it occasioned the study of sophistic argumentation, of the distinction between intellect and sense, and of the knowing subject in general.

§ 2. SOCRATES

61. Socrates of Athens (469–399 B.C.).—LIFE.—Socrates lived during the period in which his native city was at the height of its splendor. Following the occupation of his father, he was originally a sculptor, until the Delphic Oracle called upon him to devote his life to the quest of truth. His home life was unhappy, not only because of his vixenish wife Xanthippe, but also because his calling made him very neglectful of his home affairs. He taught those of his fellow-citizens whom he could interest, and disputed with the Sophists in the forms which history has called the Socratic dialogue and Socratic irony. He surrounded himself with a select circle of disciples, among whom Plato, Xenophon, and Alcibiades were numbered. His noble character is extolled by the ancients. He was condemned to drink the fatal hemlock, because of his freedom of speech and of his unbelieving attitude toward the popular religion of Greece.

Socrates wrote nothing. Our knowledge of his philosophy is derived principally from the writings of Xenophon and Plato. From their divergent accounts his true teaching is ascertained according to the following criteria: (1) Xenophon's shallowness in matters philosophical makes it unlikely that he had a profound grasp of the teachings of Socrates, or that he adulterated them with ideas of his own. (2) The earlier dialogues of Plato contain a more faithful and accurate account of the doctrines of Socrates, because they are the product of the less original and mature period of Plato's thought.

62. PHILOSOPHY.—(A) *The Socratic Method*.—Socrates chides the earlier Greek philosophers because of their neglect of ethics, which is the most important part of philosophy. He censures their method as having failed to establish universal concepts, which alone have scientific value. The consensus of mankind, being the voice of nature, is the criterion of truth. Definitions, expressing the nature of things, are obtained by induction (*Socratic dialectics*). Socrates propounded his teachings in discussions with the Sophists and with the populace. He brought others to his point of view by adroit questions, and refuted their errors by showing in this way the absurd consequences of their false assertions (*Socratic irony*).

(B) *Ethics*.—Man has an immortal soul, which after death will receive just retribution for his works. Since the intellect is perfected by the soul's liberation from the body, the essential retribution of the good consists in a more perfect knowledge of God. Therefore, man has the duty of preparing himself for this knowledge by a virtuous life. Nat-

ural law is the rule of morality, because it is established and sanctioned by God. The ethical good is that which is in accord with man's rational nature as such. Virtue, which consists in the habitual disposition to do the good, is identical with knowledge; for it is impossible for any one not to choose the good once he knows it. Ignorance is the only ground of vice. Hence the necessity of education.

(C) *God*.—Socrates proves the existence of God from the order in the universe and from the moral order. As the author of all perfection, God is all-powerful. There is only one God, for there can be only one source of perfection and only one self-existent being. If Socrates' apparent identification of God and the world is regarded in the perspective of his philosophy as a whole, it may be interpreted as the omnipresence of God overseeing all His works.

63. HISTORICAL POSITION.—(A) Socrates deserves high praise for having waged relentless warfare against the pernicious excesses of the Sophists even at the cost of his own life. He sincerely desired the reform of morals and wished to contribute to the welfare of the commonwealth by the right education of youth. (B) Though apparently out of sympathy with the earlier nature philosophers, Socrates furthered the study of nature by his influence on Plato and Aristotle, who devoted the same care to the formulation of metaphysical definitions and to definitions of physical objects, as Socrates had bestowed upon ethical concepts. The historical position of Socrates is determined by his dialectics of definition and his original conception of science as universally valid knowledge. These views became the basis of the philosophy of Plato and Aristotle.

(C) The principal error in the philosophy of Socrates is the identification of knowledge and virtue, a form of exaggerated intellectualism resulting from overconfidence in nature, which it remained for Plato to correct.

§ 3. PLATO

64. Plato of Athens (427–347 B.C.).—**LIFE.**—Plato was a pupil of Socrates and the teacher of Aristotle. His descent is traced back through Solon to Codrus. These family connections gave him brilliant prospects as a statesman, but he preferred a scholar's life. He was the constant associate of Socrates during the last nine years of the latter's life. The whole cast of his life and thought was determined by this long and fruitful companionship. After the death of Socrates he undertook several journeys for the purpose of study. He spent some time with Euclid in Megara. Then he travelled to Cyrene, to Heliopolis in Egypt, and to the Pythagorean community in Sicily. His bold speech angered Dionysius, the Tyrant of Sicily, who had him sold into slavery. But he was soon ransomed and returned to Athens, where he founded the so-called Academy in 389 B.C. From the year 364 Aristotle was its most distinguished member. After the death of Dionysius, Plato returned to Sicily at the invitation of Dionysius the Younger, and endeavored to put his ideal of the State into practice in Syracuse; but the attempt, which was made three times, was doomed to failure.

65. WRITINGS. — Thirty-five dialogues, some of them spurious, have come down to us over the name

of Plato. Among them are *The Banquet*, *Phædo*, *Phædrus*, *The Republic* (celebrated passage on metaphysics), *Theætetus* (on the nature of science and error), *The Laws*, *Timæus*, *The Apology of Socrates*, and *Critias*.

66. PHILOSOPHY. — (A) *Plato's Philosophy in General*.—(1) Plato proposed his philosophy, which embraces the whole of human thought, in the form of dialogues and myths. (2) He adopted, as the basis of his philosophy, Socrates' theory of science as universally valid and necessary knowledge, but he corrected Socrates by distinguishing science from virtue. (3) The supersensible idea is the only source of philosophical knowledge. The good is the idea as the object of irresistible striving in the nature of man. Virtue is the love of this vague perception of the absolute, and the insatiable desire of exchanging this mortal life for immortality.

(B) *Dialectics*.—(1) The ideas are the true archetypes, or immaterial patterns, of which individual things are imperfect copies. The object of our knowledge, which is universal, necessary, and immutable, cannot be the ceaselessly flowing and therefore unknowable things of sense. It is an extramental reality, existing in itself above and beyond the world. (2) The hierarchy of ideas corresponds to that of concepts, and there are as many ideas as there are abstract concepts. The idea of the good, as the final and formal cause of the universe, is the supreme idea. (3) In the earlier phase of Plato's theory of the ideas, the idea of the good is the most impersonal abstraction. In the later phase of the theory, the idea of the good is probably identical with God.

(C) *Physics*.—(1) Physics is the study of the manifestation of the ideas in the sense-world. Material objects are constituted of the idea (or being) and of matter (or not-being). In the view of Plato, “matter” is eternal. This primitive material, which is an emanation from the world-forming God (or demiurge), contains an element of evil, or imperfection. The world-soul is the principle of motion, of form, and of every process of sense and intellectual cognition. The doctrine of the world-soul is an obscure and fantastic theory. (2) Corporeal substances are constituted of the Empedoclean elements, each of which has its own proper and essential mathematical form. The smallest particle of each element is a mathematical surface. The ultimate constituents of bodies, therefore, are mathematical surfaces, not atoms. These surfaces constitute a physical object by their arrangement into definite mathematical figures. (3) The soul is fashioned by God from the same elements as the other parts of the universe. In the *Laws*, IX, 854, *Meno*, 81, and *Phædrus*, the union of the soul with the body is explained as violent, unnatural, and punitive; but in *Timæus*, 41, it is explained as the effect of a cosmic law. The soul consists of the immortal *nous*, which resides in the brain; the perishable *thymos*, residing in the lungs; and the lower soul (*epithymia*), residing in the abdomen. Intellection is the reminiscence of the ideas which the soul contemplated in a former existence. The function of sensation is to call up this reminiscence. Plato was deeply convinced of the existence of a future life. He proved the immortality of the rational soul from its simplicity, which renders decomposition impossible; from the

goodness of God; from the fact that it is the principle of life, rendering a transition from being to not-being impossible; and from the longing of the wise man to be freed from the fetters of the body and to come into direct communication with the world of ideas.

(D) *Ethics*.—(1) The highest good consists in the contemplation of the ideas by the soul in a state of separation from the body. (2) Virtue is a disposition of the soul acting in conformity with its purpose. This is attained by the control of the *nous* over the *thymos* and the *epithymia*. (3) The State was formed because the individual alone is incapable of providing for his temporal needs and of attaining the highest good. In the ideal State there are three classes of citizens, corresponding to the three souls of the individual: the philosophers, corresponding to the *nous*, are the governing class, and their virtue is wisdom; the warriors, corresponding to the *thymos*, provide for the defence of the nation, and courage is their virtue; the producers, corresponding to the *epithymia*, provide for the material necessities of the nation, and self-control and obedience are their virtues. The governing class has the power of establishing and controlling education, of preventing discord and rebellion, of declaring children to be national property, of suppressing the family (except within its own caste), and of establishing common ownership of property.

(E) *Religion*.—(1) Plato proves the existence of God as a ruling intellect from immanent and extrinsic teleology, as sovereign intelligence by the principle of causality, as the first mover from the existence of movement, as a necessary being from the

existence of contingent beings, and as a perfect being from the participation and the degrees of perfection. (2) God is a free, personal being. Subordinate gods mediate between God and the world. It is doubtful whether Plato held the Providence of God. (3) The relation of God to the idea of the good is uncertain. ZELLER and ÜBERWEG identify them; TRENDELENBURG held that God is subordinate to the idea of the good; DE WULF and HERMANN regard them as co-ordinate. This divergence of interpretation shows the obscurity of Plato's text.

67. HISTORICAL POSITION.—(A) *Merits*.—Plato's dialectic is the first attempt to systematize objective concepts, and furnishes the foundation for the epistemological views of Aristotle. According to Aristotle, Plato's theory of ideas arose from the combination of the Socratic concept with the Heraclitean notion of flux. Plato hypostatized the Socratic universals, and made them at once transcendent and immanent in particulars. The immutability and universality of Plato's ideas also show traces of Parmenides' theory of being. Plato is the first Greek philosopher who proved the immortality of the soul. His concept of God brings out more prominently than did Anaxagoras the personality, freedom, wisdom, and power of God. If the idea of the good is to be identified with God, Plato maintains that God is the last end of man.

(B) *Defects*.—The insistence of Plato in directing attention from the fleeting objects of sense to the contemplation of the ideas is misdirected, and his method is false. The dualism of God and the idea of the good, of the ideal and the phenomenal world, of popular and philosophic virtue, and of the indi-

vidual and the State is disastrous to the philosophy of Plato. The theory of the ideas is exaggerated realism. The physics of Plato contains the two fundamental theses of mechanism: simple and immutable entities. Plato's psychology contains the germ of occasionalism, and it is a one-sided study of the mind, neglecting the will and consciousness. The theory of the three souls in man destroys the unity of consciousness and of personality. Plato errs in regarding the soul as a complete substance. Plato's Republic is a Utopian state, as impractical as the modern theories of communism. Its organization is an enlargement of the three souls of man and a miniature of the three parts of the universe. All these errors—Platonism is a very consequent system—are due to the *a priori* dialectical basis of Plato's philosophy.

68. HISTORICAL INFLUENCE. — The influence of Plato's philosophy was far-reaching. The Academy, the system of Philo, Neo-Platonism, Platonic elements in the philosophy of the Fathers of the Church, and the Platonic current in Scholasticism are developments or offshoots of his thought.

69. The So-Called Christian Platonism.—Of all the pre-Christian philosophers Plato appealed most to the early Christian apologists and to the Fathers of the Church. His teaching, as they knew it through Neo-Platonism, did not bring him into immediate conflict with the doctrines of the Church to the same extent as the philosophy of Aristotle, his greater pupil, appeared objectionable to the early Schoolmen. On the other hand, Plato anticipates certain of those doctrines of the Church which may be known by the natural light of unaided reason,

and also certain important elements in her practice. Plato argued that there is an incurably evil element in man to which only death can put an end; the Church teaches that there is an evil inclination in man which can be remedied only by the grace of God. Plato thought that the body interferes with the soul, and often encrusts and embrutes it; he spoke of mortifying it here and of being happily rid of it hereafter; he taught men to shun its vanities and affections, to leave even politics and public life in order to devote themselves to the contemplation of God and the saving of their souls. He told his disciples to look forward to a future life and to a scheme of rewards and punishments that followed a man's conduct in his time on this earth. He is strict with human nature and anxious for its future; he has a feeling that, except for a few favored individuals, we cannot be trusted to do our duty unless temptation is removed out of our path, and we are barricaded into virtue.¹ These moral counsels of Plato are reflections of natural reason unaided, and there is no evidence that he had them from the Old Testament, as Justin Martyr asserts.² The Schoolmen embodied into the Scholastic system certain doctrines of Plato transmitted to them by St. Augustine and neglected by Aristotle, such as the doctrine of the participation of being.

¹ See LIVINGSTONE, *The Greek Genius and Its Meaning to Us* (Oxford, 1915), pp. 195 sqq.

² *I Apology*, 44, 59. Compare with this the reserve of St. AUGUSTINE, *De Civitate Dei*, VIII, 11.

§ 4. ARISTOTLE

70. Aristotle of Stagira (384–322 B.C.).—LIFE.—Aristotle was the son of Nicomachus, the physician of the Macedonian king, Amyntas. His father's profession undoubtedly fostered his bent for science and gave him valuable connections with the Macedonian court, but nothing is known of his education in Thrace. Aristotle was left an orphan at the age of seventeen, and in the following year came to Athens, where he joined the School of Plato. Although the civilization of Thrace was thoroughly Greek in character, Aristotle always remained a stranger in Athens, and took no part in its civic and political life. For twenty years, until the death of Plato, he remained a member of the Academy. His veneration for Plato was so great that he declared: "An evil man has not even the right to praise him." After the death of Plato Athens seems to have had no attraction for Aristotle, and he seems not to have contemplated the erection of a school of philosophy in that city. Hermias, the ruler of Atarneus and Assos, who had for a time been a member of the Academy, invited Aristotle to his court. He remained there until Hermias was betrayed into the power of the Persians. Then he married Pythias, the niece of Hermias, and lived in Mytilene.

In 343 or 342 Philip of Macedon placed in the hands of Aristotle the education of his thirteen-year-old son, who is known in history as Alexander the Great. At the age of sixteen years Alexander was appointed regent by his father; from this time he took an active part in the government and the wars of Philip, and could no longer receive regular

instruction from Aristotle, who now retired to Stagira, his native city. His desire for scientific work led Aristotle back to Athens in 335/334, about thirteen years after Plato's death. His achievements during the twelve years of life which remained to him are almost incredible, for practically all of his writings were composed during this time. He established a school in the Lyceum, which adjoined a temple of Apollo in a suburb of Athens. Besides philosophy, Aristotle taught oratory. He devoted the morning to individual pupils and the afternoon to groups. His school came to be called the *Peripatetic School*, because he walked about in the shady lanes of the Lyceum during his discussions with his pupils. Probably Aristotle owed to the generosity of Alexander the Great a part of the means with which he was enabled to assemble in the Lyceum an extraordinarily complete and valuable library and a great collection of scientific specimens. The laws and constitutions of foreign peoples formed a prominent item of Aristotle's library.

In his last years Aristotle's relations with Alexander were disturbed. The latter was flushed with success and gluttoned with power, and surrounded by flatterers and designing men. The bold opposition of Callisthenes, Aristotle's pupil, who was at the court of Alexander, and the slighting remarks which were heard in the armies concerning Alexander's interest in science, all contributed toward his estrangement from Aristotle. The sudden and unexpected death of Alexander awakened rebellion in Athens against the Macedonian hegemony. Every friend of Alexander was in danger; though Aristotle had never taken part in political life, his connection

with the king made it imperative for him to leave Athens. He fled to Chalcis in Eubœa, where he possessed a country house. A year later he died there from an ailment of the stomach, from which he had been suffering before he left Athens. He was buried in Stagira, his native city.

Aristotle's "will" should be regarded as rather a list of directions to his friends than a formal testament. In it he directed that the remains of his wife be interred by his side, and that a monument be erected as a votive offering for his mother. He also provided for his friends and his slaves. He appointed Theophrastus head of the Lyceum, and bequeathed to him his library, his most valuable possession.

All the reliable testimony of the ancients speaks of the character of Aristotle in terms of high praise. They attribute to him noble principles, keen and penetrating judgment, a mind receptive for everything good and beautiful, deep affection for his family, a high ideal of marriage, unswerving loyalty to his friends, gratitude toward his benefactors, and kindness toward slaves and toward the needy. He was gifted with a power of intellect which is perhaps unmatched in the history of the world, and he applied himself to his chosen task of scientific research with unwavering persistence and concentration.

71. WRITINGS.—The principal writings attributed to Aristotle may be classified under their medieval titles as follows:

(1) Logic: *The Organon*, including *Categoriæ* (on the Predicaments), *De Interpretatione* (on the Proposition), *Analytica Priora* (on the Syllogism), *Analytica Posteriora* (on Demonstration), *Topica*

(on Probable Reasoning), *De Sophisticis Elenchis* (on Sophistical Reasoning).

(2) Physics: *Physica* or *Physicæ Auscultationes* (a general treatise on physics), *De Cælo*, *De Generatione et Corruptione* (on substantial change), *Meteorologica*.

(3) Psychology and Biology: *Historia Animalium*, *De Partibus Animalium*, *De Incessu Animalium*, *De Generatione Animalium*, *Parva Naturalia*, *De Anima*.

(4) Metaphysics: *De Prima Philosophia* (general metaphysics and natural theology. Collection and redaction apparently made after Aristotle's death).

(5) Ethics: *Ethica ad Nicomachum*, *Magna Moralia*, *Politica*, *Constitutio Atheniensium*.

72. PHILOSOPHY.—(A) *General Characteristics.*—Only a part of Aristotle's works, apparently his own lecture notes, have come down to us. Putting speculative science on a par with practical knowledge, Aristotle formulated a complete system of philosophy, the essentials of which have not been superseded. It includes speculative philosophy, the end of which is truth; practical philosophy, the end of which is action; and poetic philosophy, the end of which is the artistic product. Speculative philosophy is divided into the First Philosophy (that is, general metaphysics and natural theology), Mathematics, and Physics. Practical philosophy is divided into Ethics, Economics, and Politics. Logic is not a part of the philosophical sciences as classified; it is the "vestibule of philosophy."

(B) *Logic.*—(1) Logic is the system of laws which the human mind must follow in order to acquire scientific knowledge. Science is the knowledge of a

thing through its causes. Philosophy is the knowledge of things through their ultimate causes. Demonstration and the syllogism are the foundation of the logic of Aristotle, for it is through them that we attain to a knowledge of things and their causes. Logic is divided into three parts, corresponding to the three operations of the mind: ideation, judgment, and inference. (2) Logic studies the concept in so far as it may become an element of a judgment. Aristotle divides the predicates, which may be attributed to an object, into the categories of substance, quantity, quality, action, passion, relation, where, when, posture, and habit. (3) A proposition, the verbal expression of a judgment, is significant speech which expresses the inherence or non-inherence of something in something else (*De Interpretatione*, 5, 17a, 23). In Aristotle's logic the quantity, quality, modality, and opposition of propositions are studied. (4) A syllogism is a discourse in which, certain things being posited, something else than what is posited follows on their being true (*Analytica Priora*, I, 1, 24b, 18). There are three classes of syllogisms: demonstrative, probable (*topoi, aporia*), and sophistic. Demonstration is a syllogism which yields scientific knowledge. There are two kinds of demonstration: *demonstratio quia* and *demonstratio propter quid*. The former, manifesting the cause, is the more perfect, but not always available. Since there can be no infinite regression, demonstration must be grounded on evident principles. Some of these principles are common to all sciences; others are proper to certain sciences. Some are self-evident; others are established by induction. Induction begins with facts of personal

experience, and reasons back to their cause or principle. Aristotle's inductive proof is enumerative.

(C) *The First Philosophy*.—(1) Metaphysics is the study of substance in general.¹ It is distinguished from the other sciences by the universality of its object. The observation of a subsistent reality in which adventitious realities inhere is the foundation of the distinction of substance and accident. (2) The doctrine of act and potency is the foundation of Aristotle's philosophy. He devised it to explain change, which he defines as the act of an imperfect subject. The doctrines of matter and form, of the universal and the individual, and of cause and effect, are applications of the doctrine of act and potency. (3) Matter and form explain the change we observe in the objects of our experience. There must be in the object undergoing change a potential principle, undetermined as such and actuated in the process of becoming; and a second principle, determining this potential principle in every process of actualization. The former principle is matter; the latter is the form. The form is the principle of the organization, the intrinsically teleological activity, and the unity of an object. Matter is the principle of imperfection, evil, multitude, and extension. The theory of matter and form is applied, partly in the strict sense and partly in an analogical sense, to corporeal substance, mathematical being, soul and body, genus and species, premises and conclusion, and to the active and the passive intellect. (4) Aristotle's solution of the problem of the universals is moderate realism. The individual, which is defined as that

¹ See *Met.*, XI, 1. Cf. S. THOM., *In IV Met.*, lect. 1; *In XII Met.*, lect. 1.

which cannot be predicated of another nor inhere in it, is alone capable of existence.² The universal is not a thing in itself; it is immanent in individuals, and multiplied in or with them. It has an independent form only in the subjective consideration of the mind. (5) A cause, in general, is a principle of being. There are four causes: the material cause, or that of which a thing is made; the efficient cause, or the principle which makes a thing become; the formal cause, which makes a thing what it is; and the final cause, or the end for which a thing is. There are true efficient causes: for change is the transition from potency to act, and the potency as such does not contain the sufficient reason of its actualization. Aristotle proves the existence of final causes in the world from the co-ordination of the activities of things, and from the constancy of the cosmic order toward the realization of which every being contributes. (6) Aristotle proves the existence of God as the first of all substances from the existence of physical movement and order in the universe. Since God is a pure act, He is unmoved. He is substantial thought, eternally thinking Himself (*noësis noëscos*) and eternally blessed. God has no knowledge of the world, and consequently it is not the object of His providential care; for He cannot know change without changing with it. God is not the efficient cause of the world; but, as the primary object of love, He is the final cause of all things.³

(D) *Physics*.—(1) Corporeal being as subject to

² *De Præd.*, II, 1b, 3-9; V, 2a, 11-14.

³ For Aristotle's doctrine on God see *Metaphysics*, XII, 7, 1072a, 12-29, and 36 to end; 1072b, 14-30; XII, 9; *Ethica Nic.*, VII, 14, 1154b, 25; X, 8, 1178b, 9.

change is the object of physics. (2) There are four kinds of change: substantial becoming and desition, quantitative and qualitative change, and local motion. Change is explained by a succession of substantial or accidental forms. Corporeal substance is composed of prime matter and a substantial form. The form is the first act of a physical body and the reason of its properties. Matter is a pure potency and cannot exist for itself alone. The substance is "second matter" with regard to the accidents which inhere in it. Privation, the principle of becoming, is the absence of a requisite form. The exigence of a form is due to a disposition of matter to cease to have one form and to receive another when corporeal substance is undergoing change under the influence of external causes. Every stage of becoming is teleologically directed toward the succeeding form. (3) The earth, which is the center of the universe, is constituted of the Empedoclean elements. Each of these elements has a natural, rectilinear movement toward its proper place. Since the natural movement of celestial bodies is circular, they consist of a fifth essence, or element, which is unbecome and indestructible. Heavenly bodies are more perfect than terrestrial bodies, for their motion is perfect. The universe is finite and eternal. A plurality of worlds is impossible.

(E) *Psychology*.—(1) The soul is "the first actuality of a natural body furnished with organs."⁴ "The soul is a substance in the sense that it is the form of a natural body having in it the capacity of life."⁵ (2) There are three souls: the vegetative

⁴ *De Anima*, II, 1, 412b, 5; cf. 412a, 28.

⁵ *Ibid.*, 412a, 20.

soul, having the activities of nutrition, growth, and reproduction; the sensitive soul, having in addition the activities of sensation and appetite; and the rational soul, possessing also the faculty of intellection. The more perfect animals have the power of locomotion. Nutrition is the fundamental vital function, for it makes the living being such. The internal senses are the central sense, memory, and imagination. The central sense is, firstly, the sense which gives us the consciousness of sensation; and secondly, by thus holding up in one act before the mind the objects of our consciousness, it is the faculty which enables us to distinguish between the reports of the different senses. (3) Sense-perception is the faculty of receiving the forms of outward objects independently of the matter of which they are composed. The object of sense may be either special (*e.g.*, color is the special object of the sense of sight) or common (that is, apprehended by several senses in combination). The process of sensation consists in actualizing into an intentional image the faculty in potency to know, as a reaction to the stimulus it receives from the object through some medium. Sensation has objective value, because the object is its cause and is similar to the form it effects in the sense by psychic contact with it. (4) The rational faculty, consisting of the active and the passive intellect, is proper to man.⁶ The passive intellect, being in potency to its act, is actualized by the sense image and the active intellect, and thus knows its proper object, the quiddity of material objects. The active intellect is a "divine principle

⁶ *De Anima*, III, ch. 5. Cf. *De Anima*, ed. HICKS (Cambridge, 1907), pp. 498-510.

coming from without.”⁷ The passive intellect is attached to sensibility, and becomes and ceases with the organism.⁸ The active intellect is eternal and impassible. For the rest, Aristotle’s doctrine of the active intellect is incomplete and open to various interpretations. Intellectual cognition is objectively true, for the quiddity which the intellect abstracts from the sense image is the constitutive of the object known; but the abstract and universal form which it has in thought is the product of the mind. (5) The soul is the substantial form of the body. The *compositum humanum* is the principle of the vital activities. The mind (*nous*) is spiritual and immortal. If the active intellect is an extrinsic principle, as many interpret Aristotle’s text, there can be no personal immortality.

(F) *Practical Philosophy*.—(1) The actions of the individual in respect of his last end constitute the subject matter of ethics. The harmonious exercise of all faculties, especially of the higher ones, constitutes the last end of man. Beatitude consists in the possession of the highest good and is attained by the practice of virtue. (2) Man is by nature a social animal. The State is the perfect form of society. The purpose of the State is the promotion of happiness and of the practice of virtue, by means of which happiness is attained. The character and the needs of a people determine which is the best form of government for it. Aristotle himself inclines toward an aristocratic republic. The family is the social unit of which the State is a development.

⁷ *De Gen. An.*, II, 3, 736b, 28. Cf. HICKS, *op. cit.*, pp. lxiv-lxvi.

⁸ Cf. HICKS, *op. cit.* p. 506.

The child has no rights in respect of its father. Slavery is a natural institution.

73. HISTORICAL POSITION. — (A) Aristotle is regarded by many as the world's greatest genius. He is the creator of logic, psychology, the science of the State, the history of philosophy, botany, and zoology. His logic has been appropriately termed "the most momentous discovery of a single mind recorded in history."⁹ Aristotle's logic and metaphysics are the foundation of Scholastic philosophy, the former contributing the method and the latter the basic concepts. In the *First Philosophy* is found the earliest philosophical formulation of monotheism. The empiric basis of science and of philosophy, systematic tendency, and completeness are salient characteristics of Aristotle's work. (B) Aristotle was a close and critical student of the work of his predecessors. His metaphysics owes much to Parmenides and Zeno. In regarding matter as a real principle, he opposes Plato's view that matter is not-being. In teaching that matter and form are united, he rejects Plato's doctrine of the separate existence of the ideas. He holds that Plato's theory of ideas is powerless to explain the unceasing life and change in nature, and that it is incompetent to explain knowledge and existence. Aristotle's moderate realism combines the metaphysics of Heraclitus and Parmenides. (C) Aristotle's philosophy is not free from defects. Without predecessors in deductive logic, he overestimated the ability of the human mind to penetrate the essences of things and

⁹ HUSIK, *History of Medieval Jewish Philosophy* (New York, 1916), p. xxx,

to deduce their properties by *a priori* demonstration, and he failed to recognize the function of experience in scientific investigation. Aristotle's doctrine on the rational soul is fragmentary and obscure. In ethics he lays no stress on the duty of obedience to God, nor on the future sanctions of the moral law. He endeavored to justify slavery. In his natural theology the personality of God appears to be doubtful, since no mention is made of God's will. The Pure Act has no knowledge of the world, and exercises no providential care over it. Action is, according to Aristotle, incompatible with His nature. It is not clear in what sense God is the final cause of the world, nor is any reason given for the existence of the world. It was in Aristotle's theology that the teleological explanation of becoming, by means of which he had overcome the mechanism of his predecessors, failed him. It remained for the great Schoolmen of the thirteenth century to correct these errors and to erect the noble edifice of Scholasticism upon Aristotle's permanent foundations of scientific thought.

§ 5. THE POST-ARISTOTELEAN PHILOSOPHY OF THIS PERIOD

74. General Characteristics.—(1) The study of ethics dominates the philosophy of this period. (2) The misfortunes of Greece atrophied the philosophical power of Greek genius. Men were concerned in the first place about their personal well-being; hence the study of individual ethics is prominent in this period. (3) The philosophy of this period has a cosmopolitan character, owing to the denationalization of the social life of the Greeks.

75. Division of the Philosophy of this Period.—I.

THE ARISTOTELEAN SCHOOL, the NEW ACADEMY, the STOA, and the EPICUREAN SCHOOL flourished from about 300 to 150 B.C. II. ECLECTICISM was predominant from about 150 B.C. to A.D. 100. III. THE NEW SCEPTICISM appears from about A.D. 100 to 300.

I. THE PHILOSOPHICAL SCHOOLS OF THE THIRD AND SECOND CENTURIES B.C.

76. The Stoic School.—HISTORY.—The principal philosophers of the Stoic School are ZENO, the founder of Stoicism (about 342–270); CLEANTHUS, the immediate successor of Zeno (about 331–251); and CHRYSIPPUS, the pupil and successor of the preceding (about 282–208).

77. GENERAL DOCTRINES OF THE STOICS.—(1) All being is matter. Change is caused by a force immanent in things. God is the world-soul. All change is a necessary evolution of the divinity. (2) Thought is collective sensation. Certitude is attainable, because it is required for ethical conduct. The practical necessity of the individual is the ultimate criterion of certitude. Cosmic determinism excludes free will. Virtue, which consists in living according to the laws of nature and the will of the divinity, is the highest good. The morality of an act is determined, not by the nature of the act, but by the intention with which it is done. The doctrine of Stoic apathy teaches that all emotion is intrinsically evil, for it is contrary to reason; hence the wise man—that is, the ideal Stoic philosopher—is emotionless. Suicide is morally good when misfortune seriously threatens the tranquillity of the mind.

78. ESTIMATE OF STOICISM.—(1) Stoicism is the most comprehensive system of this period. (2) Its defects are materialism and fatalism in psychology, pantheism, and the emancipation of the wise man from the moral law. (3) The Stoic idea of the Cosmopolitan State follows directly from the Stoic doctrine of an ethical community embracing all men. Their ideal, universal empire was primarily a spiritual unity of knowledge and will, and only secondarily a political state. The Stoics were too indifferent to the world to enter upon active agitation for social reform; nevertheless, they demanded that justice and the universal love of man be applied to all men, to slaves as well as to free men.

79. The Epicurean School.—**HISTORY.**—The principal philosophers of the Epicurean School, which existed for over six centuries and spread over a large part of the Græco-Roman world, were its founder, EPICURUS of Athens (about 342–270); and LUCRETIVUS of Rome (98–54; *De Rerum Natura*).

80. GENERAL DOCTRINES.—(1) Philosophy serves the exclusively practical purpose of establishing ethical ideas. (2) The origin and nature of the world was explained by the Epicureans by a theory of mechanical atomism. They denied the existence of God and of all finality in the world. (3) All cognition is sensation. The existence of the sense-image in the mind is the ultimate criterion of certitude. (4) The human soul is composed of material atoms: hence it originates and dies with the body. The death of the soul is a consoling fact, because it puts an end to the pains and sufferings of life. (5) The well-being of the individual is the highest good. It consists in pleasure—that is, principally in the

absence of pain, and secondarily in satisfied desire. The morality of an act is determined by its aptness to bring about the painlessness of life, which constitutes pleasure. Knowledge is the highest pleasure. The highest good is attained by restraining desire within the limits in which it can be satisfied.

81. ESTIMATE OF EPICUREANISM.—(1) The Epicurean philosophy of nature has all the defects of the atomism of Democritus. (2) Epicurean ethics is utilitarian, since it reduces good and evil to pleasure and pain. In its own time it made a practical appeal to a large class of people, owing principally to the social misery induced by the absolutistic State. (3) The tendencies of the time and the misconceptions of the disciples and successors of Epicurus led to a form of doctrine and practice that brought the system into discredit from which it never quite recovered.

82. The Sceptic Schools.—(1) The SCHOOL OF PYRRHO (360–270) existed but a short time and had little influence. Pyrrho taught that it is impossible to attain certitude, and that, in consequence, it is necessary to abstain from all judgment concerning things. Happiness consists in this equanimity, or indifference to all things. (2) The MIDDLE ACADEMY, founded by ARCESILAUS (315–240), taught that it is even impossible to know that nothing can be known. (3) The THIRD or NEW ACADEMY, founded by CARNEADES (213–129), opposed all dogmatism, especially that of the Stoics, and taught that conduct must be founded on probabilities.

According to the view of the Sceptical Schools, the sole purpose of philosophy is to procure the happiness of the individual, which consists in tranquillity

of mind. They not only deny the possibility of attaining certainty, but also declare it unnecessary for the attainment of happiness.

83. The Peripatetic School, which claimed to derive its tenets from Aristotle, occupied for a period of two centuries an inconspicuous place in the history of philosophy. STRATON of Lampsacus (d. 270), its leading representative, developed a system of pantheistic naturalism.

II. THE ECLECTIC SCHOOLS (150 B.C.—A.D. 100.)

84. General Characteristics.—(1) The Eclecticism of this period owed its development to the common doctrines of the preceding schools, to their possessing in Athens a common center, and to the Sceptic view that all the teachings of the preceding schools probably are true. (2) The Eclectics of this period are inclined to accept all doctrines which contribute to the realization of the practical aims of life. An inner voice speaking to the conscience of man was the standard by which they tested philosophical teaching. (3) The Roman Government endowed chairs of philosophy, and lectures were open to the public.

85. Stoics.—SENECA (A.D. 4–65), EPICTETUS (first century) and MARCUS AURELIUS (A.D. 120–180) were the main representatives of Stoic Eclecticism. (1) Seneca's philosophy is materialistic pantheism. The soul is an efflux of the divinity, which has a care for all things. There is in man a constant opposition between mind and sense; hence the necessity of self-discipline. Seneca frequently speaks of death, which, he says, is to be awaited with fearless indif-

ference. Virtue is the only good. Like the Stoics, he justifies suicide. (2) Epictetus, the slave philosopher, regards philosophy rather as a comfort than as a science. He speaks of divine Providence, and commends purity, submission, and the forgiveness of injuries. The main feature of his philosophy is the emphasis he lays on the power of the will, and the distinction he draws between the things which are within our command and those which are beyond our control. Happiness in his view is independence from external things. (3) The Emperor Marcus Aurelius removed the sterner aspects of Stoicism and gave it an appeal which not even Epictetus had been able to impart. "To reverence the gods and to help men" is his summary of a good life. Thus, Stoicism became for the Eclectics entirely a philosophy of deliverance.

86. The Academy.—The Eclecticism of the Academy goes back to PHILO OF LARISSA (d. 80 B.C.) and to ANTIOCHUS (d. 68 B.C.). CICERO (d. 43 B.C.), their best-known follower, began as a theoretical sceptic and ended as a practical dogmatist. He holds that there is no absolute certitude, and that the relative certitude which we have is ultimately based upon our ethical consciousness. He is convinced of the existence of God (which he proves by the teleological argument), of the immortality of the soul and of the freedom of the will. His ethics contains no new principle.

87. Peripatetics.—The Peripatetics commented on and spread the writings of Aristotle. (1) THEOPHRASTUS (375–288 B.C.) was the immediate successor of Aristotle as head of the Peripatetic School, which he directed for thirty-four years. He was not

a creative mind. From the meager fragments which are extant of his writings, it appears that his principal care was to complete and formulate in more precise terms the philosophy of Aristotle. He minimizes the distinction between the spiritual and the material. (2) ANDRONICUS OF RHODES was head of the Peripatetic School in Athens from 60–40 B.C. His chief title to fame is his complete edition of Aristotle's works, which he prepared in collaboration with Tyrannion, the grammarian. This edition included commentaries, and arranged the writings of Aristotle in the order which is still followed today. (3) ALEXANDER OF APHRODISIA, who taught in Athens from A.D. 198–211, is the most celebrated of the ancient commentators on Aristotle. Much as he disclaims it, he sometimes deviates from Aristotle. Thus, he teaches that the universals are mere concepts; that the active intellect (*nous poietikos*) is identical with the divinity; that the soul ceases with death; that the freedom of the will excludes the Providence of God. The passive intellect of Aristotle (*nous pathetikos*) becomes for Alexander the *nous epiktetos*—a term which was afterwards translated *intellectus acquisitus*. Alexander's doctrine exercised a great influence upon the Arabian philosophers and the Alexandrists of the Renaissance.

III. THE NEW SCEPTICISM

88. Scepticism.—The culmination of the Eclectic movement was scepticism. ANESIDEMUS, who taught at Alexandria just before the beginning of the Christian era, held that there is no criterion of truth,

because all representations are relative. **SEXTUS EMPIRICUS** (second century of our era) is a Sceptic, who regards everything as undecided. The true Sceptic, he holds, must assert nothing about objects; he may only describe how they affect him. In practical matters he does everything which is required by the customs of the country, but he will be careful not to say that anything is intrinsically good or bad. There is no criterion of truth, and there are no means of demonstration. This is an attitude of complete scepticism, both in theory and in practice.

CHAPTER III

THE THEOCENTRIC PERIOD

89. General Characteristics.—The despair of obtaining certitude and happiness by natural means, which marks the close of the preceding period, resulted in a philosophical reaction, which sought in a divine principle that certitude which even the sceptic mind craved, but could not give. This reaction was favored by the shifting of the center of philosophical studies to Alexandria, where Greek thought came under the influence of Oriental mysticism, and by the introduction of exotic cults into the Roman Empire. In this way Greek philosophy indirectly came under the influence of Oriental religions and ethics. This religious reaction introduced into Greek philosophy ecstatic and mystical intuitions of God as the source of certitude and happiness, and an exaggerated transcendence of God, which made necessary a series of intermediaries through which God acts on man and on the universe. Neo-Platonism is the leading philosophy of this period. It is an extensive and complete system. It possesses a remarkable coherence and convergence of doctrine, and extends over a period of three centuries. Neo-Platonism attempted in vain to assimilate certain Christian ideas into the pagan conception of the world at the very time when Christian

thinkers were incorporating into the beginnings of Christian philosophy whatever fragments of truth became known to them in pagan philosophy.

§ 1. THE SYSTEMS WHICH PREPARED NEO-PLATONISM

90. Greek Philosophy.—The revival of the ancient doctrine that religious inspiration is a source of knowledge brought about the rise of NEO-PYTHAGOREANISM. This philosophy taught that purificatory rites prepare man for communication with God, which is effected by means of divination. God is transcendent to such a degree that man is unable to know His will by any other means. Demons and lesser gods mediate between God and man.

PLUTARCH OF CHÆRONEA (A.D. 40–120), CELSUS (2nd century), and PSEUDO-HERMES TRISMEGISTUS were the chief representatives of this School. (1) PLUTARCH holds that an immediate communion of God with “man despoiled of himself” supplies the insufficiency of reason. Demons, who are intermediate between God and man, are the ministers of Divine Providence. Plutarch is convinced of personal immortality and metempsychosis. (2) CELSUS based his justification of polytheism on the doctrine of Albinus, that the gods do not act immediately on matter. Miracles are impossible, because the laws of nature, being founded on the essence of matter, do not admit of exceptions. Hence he concludes that the proofs adduced for the divine character of Christianity are invalid. The *Logos Alethes* (True Word) is the principal philosophical work of Celsus. Origen refuted the attacks of Celsus upon Chris-

tianity. (3) The writings transmitted over the name of HERMES TRISMEGISTUS originated in the first or the third century of the Christian era. They combine Platonic and Pythagorean doctrines in the endeavor to defend Egyptian polytheism against the growing influence of Christianity. According to these writings God creates the *nous*, and the latter creates the human soul. These writings have numerous points of contact with *The Shepherd* of Hermas. They influenced the *nous* doctrine of the Arabian philosophers of the Middle Ages.

91. Greek-Jewish Philosophy. — The Hellenistic Jews regarded Greek philosophy as an aid to the understanding of the Old Testament. The allegorical interpretation of the Old Testament by certain Jews is due to their desire of finding in it the ideas they took over from Greek philosophy. Following the expansion of the Roman Empire, an extensive contact began to be established between the East and the West from the second century of the Christian era. Egyptian scholars attempted to reconcile Greek philosophy with the Old Testament. The many Jews resident in Egypt could not well isolate themselves from the religious influences which surrounded them. The Sadducees and Essenes in Palestine were evidently swayed by Greek thought. The rabbis exaggerated the transcendence of God by hypostatizing divine symbols and attributes into agents of communication, and by overstressing the ministry of angels. A few of the inspired writers of the Old Testament accommodated themselves to Greek modes of thought and expression.

PHILO (about 20 B.C.—A.D. 40) was a native of Alexandria and a member of a wealthy and influen-

tial priestly family. During the reign of Caligula he headed a delegation of Jews, who vainly appealed to the Emperor for a cessation of the anti-Jewish fanaticism fomented by the Roman governor.¹ Philo regarded Greek philosophy as an adulterated form of the doctrines of the Old Testament. To justify this assumption in the face of Greek polytheism, he was obliged to interpret the Scriptures allegorically. God is transcendent to such a degree that He is inconceivable and ineffable. Matter, which is eternal, is the principle of imperfection and limitation, because it is irreconcilable with the nature of God. God acts upon the world through the *dynamis*. : They are exemplar forms (Plato) and immanent principles of activity (Stoicism). They are identical with the angels of the Old Testament and with the demons of popular Greek religion. They are distinct from God, for they are immanent in a world essentially distinct from God. They are emanations from God, and therefore divine. The human soul is a divine principle (angel, demon) in a state of unnatural union with the body. Because of the fetters of the body, man cannot know God as He is in Himself. The more man detaches himself from the body, the more he progresses in science and virtue. By a kind of supernatural illumination God manifests Himself to man as He is in Himself. In this state ecstasy supplants human consciousness. All men can know God in this manner.

Historical Position.—Philo's attempt to fuse the doctrines of the Old Testament with Platonism resulted in a falsification of revelation. The entire

¹ EUSEBIUS, *Hist. Eccl.*, II, 4, 2 sq.; 17, 1. HIERON., *De Vir. Illus.*, 11.

speculative doctrine of Philo is false. Philo's *Allegories of the Law* exerted a marked influence on the allegorical exegesis of the Jews and Gnostics, and on the emanative² pantheism of the Neo-Platonists.

§ 2. NEO-PLATONISM

92. General Characteristics.—(1) Neo-Platonism is an original syncretism of various systems of philosophy. Its exponents claimed that it was a restoration of the metaphysics of Plato, but it is much more than this. For they drew on Plato, the Neo-Pythagoreans, Stoics, and Aristoteleans as well as on Plato. (2) There were three phases of Neo-Platonism: the philosophical period of the third century, with Plotinus as its leading representative; the religious period of the fourth and fifth century, with Iamblichus as its outstanding personality; and the commenting period, with Proclus as the dominating figure. (3) The chief features of Neo-Platonism are dualism, including the doctrine that matter is essentially evil, the emanation of all things from the reason of God, redemption by emancipation from matter, and the final absorption of the human into the divine reason by continuous contemplation. (4) The Neo-Platonists knew and opposed Christianity.

I. THE PHILOSOPHICAL PERIOD

93. Ammonius Saccas (about 175–242).—Ammonius is the founder of Neo-Platonism. Porphyry

² Emanation is a process of becoming in which the product is one with the principle of its origin.

says ¹ that he was the son of Christian parents, but that philosophy led him back to the gods of Greece. When Plotinus heard Ammonius for the first time, he exclaimed: "This is my man." He became so attached to Ammonius that he remained his disciple throughout his life. Origen was also a pupil of Ammonius. The principal teaching of Ammonius seems to have been that the One transcends the world and the divine intellect.

94. Plotinus (205-270). — **LIFE.** — Plotinus was born at Leucopolis in Egypt. After the death of Ammonius, whose disciple he was for eleven years, he followed the Roman armies to Persia for the purpose of studying the philosophy of the Persians and Indians. When this attempt failed, he settled in Rome, teaching philosophy to the end of his life. His auditors included persons from all ranks of society; even the Emperor Gallienus and the Empress came to hear him. He owed his success to his extensive knowledge, his original thought, his interesting discourse, and his earnest and religious personality. His pupil Porphyry published his manuscripts under the title of *Enneads*...

95. PHILOSOPHY.—The world is an eternal process of the devolution of the highest principle, passing through the phases of the One, Intelligence, the world-soul, and matter. The One is identical with God, who has neither intelligence nor will nor any other attributes; for such attributes would introduce a dualism, and hence an imperfection into God. The Intelligence is caused by the One, and in its turn causes the world-soul. The world-soul causes matter, and unites with it to constitute corporeal beings

¹ EUSEBIUS, *Hist. Eccl.*, VI, 19, 7.

by becoming its form. Matter is the first and essential evil. There is no contradiction in the theory that matter is the end of the process of emanation, Plotinus claims, for every process of causation implies devolution.

The souls of men pre-exist in the world-soul until the necessity of cosmic becoming requires their union with matter. Only those souls which at the moment of death are no longer attached to sensibility, return after death to their primitive state. All other souls undergo a process of transmigration. Hence the purpose of life is the return of the soul to God. The knowledge from which virtue results is independent of experience and sensibility; hence virtue consists in detachment from the sensible. There are three stages of knowledge: the knowledge of the ideas, the contemplation of the intelligible world by union with the Intelligence, and the contemplation of the One, in which the soul is elevated above consciousness and change into ecstasy, and in which it loses itself in God. Since ecstatic union with God is the end of man, philosophy is essentially religious.

96. HISTORICAL POSITION. — The philosophy of Plotinus is mystical pantheism, and therefore incompatible with Christianity. His great synthetical power and his elevated moral tone make Plotinus stand out as the leading figure in the last period of Greek philosophy. In teaching that the ideas inhere in an intellect, he corrected Plato; but he erred in overstressing the Platonic doctrine of the participation of being by emanation. He falsely asserted that the intuition of God is possible by natural means. The influence of Plotinus was far-reaching,

not only upon his contemporaries, but also upon the Arabian thinkers, and through them upon the Latin philosophers of the West in the Middle Ages.

97. Porphyry (about 232–303).—Porphyry, who was born in Syria, was the most notable disciple of Plotinus. Besides editing the *Enneads*, he systematized the doctrines of Plotinus in a treatise entitled “*Aphormai pros ta noeta*” (*Sententiæ ad intelligibilia ducentes*). He laid much stress upon corporal mortification for the purpose of detaching the soul from the sense world. His emphasis on religious and ascetic practices for the attainment of the mystic union of the soul with God marks the transition from Plotinus to Iamblichus. However, he was a bitter enemy of Christianity. Porphyry was the first Neo-Platonic commentator on Aristotle. His *Introduction to the Categories of Aristotle* was widely studied and commented on by Neo-Platonic philosophers, and it gave rise to the controversy about the universals in the early Middle Ages.

II. THE RELIGIOUS PERIOD

98. Iamblichus (d. about 330).—Failing to establish contact with the Divinity by means of the mystic contemplation advocated by Plotinus, his followers sought to attain the same end by means of magical practices. Thus, the Syrian School of Neo-Platonism came into existence. Iamblichus, its founder and head, was a disciple of Porphyry, and established a Neo-Platonic School in his native Cœlo-Syria. He transformed Neo-Platonism into a sort of dogmatics of polytheism, by means of which both the learned and the political enemies of Christianity, such as the

Emperor Julian, hoped to revive the decadent pagan religion. Iamblichus multiplied the emanations of Plotinus, and identified them with the gods of pagan mythology. He regarded pagan myths and cults as symbolic expressions of philosophical doctrines. Faith in the gods, he says, moves them to communicate to man miraculous powers, divine knowledge, and the intelligence of secret symbols, by means of which they hold communion with him.

III. THE COMMENTING PERIOD

99. General Characteristics.—Commentaries take the place of creative work. When the Emperors prohibited the superstitious practices of the later Neo-Platonists, these philosophers reverted to Plato and Aristotle, without however abandoning Neo-Platonism. Constantinople, Athens and Alexandria are the centers of philosophical studies.

100. The School of Constantinople.—The Emperors endeavored to make Constantinople a rival of Alexandria as a scientific center. THEMISTIUS (fourth century), one of the great pagan commentators on Aristotle, is the principal representative of this School. He claims that the philosophy of Plato is substantially identical with that of Aristotle, and notes more than 300 points of agreement between Christian doctrine and Greek philosophy. Christian influences, however, gave to Constantinople what eminence it had in philosophy.

101. The School of Athens.—(1) ORIGIN.—The decadence of pagan philosophy was hastened by the spread of Christianity, by the work of Christian thinkers (Clement of Alexandria), and by the pro-

hibition of the superstitious practices of the Neo-Platonists by the Emperors. At the same time, a natural revulsion in Athens against the magical rites of Iamblichus resulted in a reversion to Plotinus. This is the last phase of Greek philosophy.

(2) **PRINCIPAL PHILOSOPHERS.**—**PROCLUS** (410–85) was born in Constantinople, and studied in Alexandria and Athens. From 438 until his death he was head of the School of Athens. He is entirely dependent on Plotinus in teaching the triadic progression and progressive devolution of the emanations. Besides systematizing Neo-Platonism, Proclus wrote treatises on Plato, upon which the Arabian philosophers and the Schoolmen mainly depended for their knowledge of Plato. He is also the author of “Eighteen Proofs Against the Christians,” in which his principal teaching is the eternity of the world. **SIMPLICIUS**, of whose life little is known, also belonged to the School of Athens. He maintains the substantial agreement of the philosophy of Plato with that of Aristotle. He left Athens with the other members of the school when it was closed.

(3) **END OF THE SCHOOL.**—In the year 529 Emperor Justinian closed the School of Athens by imperial decree, because the pagan doctrines taught in it were not in agreement with the convictions of the pupils, who were for the most part Christians. Thereupon a group of philosophers belonging to this School, Simplicius and Damascius among their number, emigrated to Persia, where they lived at the court of King Chosroes Nishirwan, who was a friend and protector of Greek culture. The Persian mind, however, was not receptive for Greek philosophy. In 533, when the king concluded a treaty of peace

with Justinian, they returned to Greece and continued to teach privately.

102. The School of Alexandria.—AMMONIUS HERMIÆ (third century) interpreted Aristotle in the sense of Neo-Platonism. He had many Christian pupils, and was careful not to offend their Faith. One of the interesting problems which he treats is the conciliation of the foreknowledge of the gods with the free will of man and the efficacy of prayer.

JOHN PHILOPONUS (fifth-sixth century) was a Monophysite and tritheist. In his polemical treatise, *On the Eternity of the World against Proclus*, he explains that the world is not eternal, because it is subject to change; that matter is not eternal, because there is a first cause; and that the act of creation is eternal, but implies no change in God. In the treatise, *The Arbiter*, he identifies the concepts of nature and person, inferring that there is one nature in Christ, and that there are three natures in God.

In the sixth century the Alexandrian School of Philosophy became entirely Christian. When the Arabs took Alexandria in 640, they burned its famous library. Alexandria now became a center of Arabian scholarship. OLYMPIODORUS THE YOUNGER is the last of the Neo-Platonists (sixth century). He lays stress on the system, has a theory of the virtues, and teaches a natural intuition of God.

103. Decay of Roman Philosophy.—When Rome ceased to be the political capital of the world, her scientific prestige was lost. The fourth century produced only insignificant treatises on logic and translations from the Greek (VEGETIUS PRÆTEXTATUS, MARIUS VICTORINUS). CHALCIDIUS and MACROBIUS (fifth century) wrote Platonic and Neo-Platonic

compilations, which were consulted in the Middle Ages. MARCIANUS CAPELLA and BOËTHIUS derived their ideas from Greek philosophy, but belong to the Middle Ages.

Greek thought continued to influence Byzantine, Asiatic, and Western philosophy. PSEUDO-DIONYSIUS transmitted Greek influences to Christian theology.

Part II

PATRISTIC PHILOSOPHY

INTRODUCTION

104. Orientation. — Speculative science in this period was used for the defence of Christian dogma. Hence, philosophy came to be looked upon as a secondary science. Its use was incidental, and polemical needs determined the choice of the philosophical problems which were studied. Patristic philosophy is a religious philosophy, for its orientation is determined by the dogmas of the Church, and its only scope during this period was to serve as the “handmaid of theology.”

This Patristic principle that philosophy is the handmaid of theology (*philosophia est ancilla theologiæ*), is grounded on Aristotle’s *Metaphysics*, II, 2, 995b, 10 sqq. It is found either in sense or in terms in Philo, Clement of Alexandria, St. John Damascene, St. Gregory of Nazianzus, St. Peter Damian, Rupert of Deutz, Robert of Melun, and the Schoolmen generally. According to the Fathers, its meaning is: (a) that theology is a higher science than philosophy, because of its object, certitude, and value; (b) that philosophy prepares the way

(*præambula*) for theology by establishing on a rational basis the presuppositions of revelation, and serves theology (*pedissequa*) by expressing the content of revelation in scientific terms and casting its proof into scientific form, by arranging it systematically, by showing that revelation does not contradict reason, and by drawing inferences from the data of revelation; (c) that in its own field philosophy, possessing its own object and method, is positively, but not negatively independent of theology. There can be no contradiction between natural and supernatural truth, because God is the source of both.

Among the typical problems studied both in philosophy and in theology during this period are the transcendence of God, creation, Providence, the essential dependence of man upon God, the distinction of soul and body, and personal immortality.

105. General Tendencies.—Various tendencies of philosophical thought are found during the Patristic period: (1) the apologists of the second century list certain fundamental doctrines in which Christian and pagan philosophy agree, and others in which they differ; (2) the ecclesiastical writers of the second, third and fourth centuries show the possibility of expounding Christian dogma with the aid of Greek philosophy; (3) St. Augustine is the greatest exponent of the rational and superrational character of the Christian religion; (4) Patristic philosophy is not systematized. Philosophical work in this period was fragmentary and of an incidental nature. The acceptance of the dogmas of Christianity by all effected a certain unity of philosophical thought.

To a certain degree the Fathers were under the influence of the Greek philosophical ideas which

pervaded the intellectual world in their time. They were eclectics in philosophy. Through Neo-Platonism, they were tributary to Plato's ideal tendencies, which they endeavored to interpret in the spirit of Christian dogma. They also accepted detached ideas of Aristotle, though in general they distrusted his theology, physics, and psychology.

106. Division.—Since the rise of theological controversies determined the orientation of Patristic philosophy, it may be divided into two periods: I. *Ante-Nicene* (—325); II. *Post-Nicene Philosophy* (fourth—seventh centuries).

107. Sources. — *Primary Sources:* GOODSPEED, *Die ältesten Apologeten* (Göttingen, 1914); MIGNE, *Patrologia Græca et Latina*; *Die griechischen christlichen Schriftsteller*, edited by the Prussian Academy of Sciences (Berlin, 1897—); *Corpus Scriptorum Ecclesiasticorum Latinorum*, edited by the Vienna Academy of Sciences (Vienna, 1866—). *Secondary Sources:* ÜBERWEG, *Grundriss der Geschichte der Philosophie*, vol. II, 10th edition by BAUMGARTNER (Berlin, 1915); STÖCKL, *Geschichte der christlichen Philosophie zur Zeit der Kirchenväter* (Mainz, 1891).

CHAPTER I

ANTE-NICENE PHILOSOPHY

108. Gnosticism. — Gnosticism, the principal heresy of the first three centuries, was connected with Greek philosophy by the solutions which it devised for the origin of evil and of the world in which evil exists. Neo-Platonic ideas linger in the view that the *gnosis* is a specifically religious form of knowledge, superior to revelation. Under the influence of Philo, the Gnostics explained the origin of evil by the existence of two first principles: God is the principle of being and of the good; matter is the principle of evil. Under the influence of Plotinus, the Gnostics explained the origin of evil by the emanations of the divinity, resulting in less and less perfect eons. According to the latter view, the world is a mixture of the divine with matter. The consummation of all things is effected by the restoration of all (*apokatastasis pantōn*), the return of all things to their original state. The Gnostics had a penchant for the allegorical interpretation of Scripture.

The School of Alexandria, with Clement of Alexandria and Origen as its leading representatives, was the principal ante-Nicene philosophical opponent of Gnosticism. Problems of natural theology, anthropology, and ethics occupied the foreground.

109. Clement of Alexandria (b. 140/150; d. before 215/216).—**LIFE.**—Titus Flavius Clemens was born

in Athens of heathen parents. He was already an adult when he became a Christian. About the year 180, he was a pupil of Pantænus in the Catechetical School of Alexandria. He became a priest, and later head of the school. During the persecution of Severus he fled from Alexandria. The principal writings of Clement are: *A Hortatory Address to the Greeks; The Tutor; Miscellanies; Who Is the Rich Man That Is Saved?* and *Outlines*.

110. PHILOSOPHY.—Clement regards Greek philosophy as a gift of God to prepare the world for Christianity. Though Christian religious knowledge is based on faith, philosophy retains its value after revelation has been made. The true Christian *gnosis*, which Clement opposes to heretical Gnosticism, accepts revelation by an act of supernatural faith, and makes use of reason to investigate and in a measure to understand the object of faith. It aspires to a speculative knowledge of revelation for itself alone. It does the good for its own sake alone, and it seeks to extinguish all emotions. Like the Stoics, Clement divides the soul into two parts. He also teaches the creation of the world out of nothing.

111. HISTORICAL POSITION.—Clement is the first Christian scholar to make use of profane science on principle for the purpose of understanding revelation. He prepared the way to Christianity for educated pagans by stressing the value and importance of Greek philosophy. His theory of the Christian *gnosis* is a constructive criticism of the heretical *gnosis*. He insists that it is imperative for Christians to acquire scientific knowledge and to be well grounded in philosophy in order to combat pagan attacks on Christianity, and to make Christian schol-

arship independent of pagan science. Clement's formulation of the relations between philosophy and theology has become a universally accepted principle in Christian philosophy. St. Augustine's view is foreshadowed in Clement's view that God is not the author of evil, because evil is an action, not a substance.

112. Origen (about 185-254).—LIFE.—Origen was born of Christian parents, probably in Alexandria. His father Leonidas died a victim of the anti-Christian persecution in 202. In the Catechetical School of Alexandria Origen was a pupil of Clement. He also succeeded him as its head from 212 to 230. He studied Neo-Platonic philosophy under Ammonius Saccas. In the year 230 he was ordained priest without the knowledge of his bishop. On this account, and also because of some objectionable doctrines which he propounded, he was deposed from the priesthood. Thereupon he retired to Cæsarea in Palestine and founded a school, which became almost as flourishing as that of Alexandria. During the persecution of Decius he was subjected to torture, and may have died from its effects.

Because of the indomitable energy with which he applied himself to study, Origen was called by his contemporaries the "Man of Steel" (*Adamantinus*). He is the most prolific writer of the ancient Church, and one of its greatest scholars. Origen's principal writings are the *Hexapla* (parallel edition of the Hebrew text and Greek translations of the Old Testament); *Commentaries* on the Old and the New Testament; *Against Celsus* (defence of Christianity against the *True Word* of Celsus); *On the Principal Doctrines* (dogmatics).

113. PHILOSOPHY.—(A) *God.*—Origen proves the existence of God from the existence and the beauty of the world. God is an absolute spirit, possessing the attributes of simplicity, immateriality, perfection, and immutability. The order in the universe proves that there is only one God. The divine *Logos* created the world out of nothing. There is an infinite number of worlds, for only on this supposition is God omnipotent. God's goodness and love are the only motive of creation.

B. *The Soul.*—Origen proves the spirituality of the soul by these arguments: (a) the object of knowledge is supersensible; (b) man knows God, who is a spirit; now like knows like. In the beginning God created all things, including all human souls. Before the soul was united with the body, it had a kind of spirit-body; for God alone is a pure spirit. In this pre-existent state the soul sinned. Thereupon matter, which hitherto had been quasi-spiritual, became corporeal, and the soul was united with a material body in punishment of its sin. Hence the present world is due rather to man's abuse of his free will, than to the will of God. On the relation of soul and body Origen gives two views. According to the first view, man has two souls, a spiritual and a material soul. The latter Origen calls "flesh"; its existence follows from the existence in man of "the will of the flesh." According to the second view, man has one soul. The conflict between the "flesh" and the "spirit" is due to the twofold object of knowledge—the sense good and the immaterial good. Origen inclines toward the latter view of the soul. Free will is given with the nature of man. Man distinguishes good from evil, and one

good from another; therefore, he has also the faculty of striving after any one of these objects. The immortality of the soul follows from these reasons: (a) the soul participates in the intellectual light of God, that is, His nature, wisdom, and holiness; therefore, it is immortal like God; (b) a being which is capable of knowing God cannot perish; (c) the soul is created after the image and likeness of God; therefore, it is imperishable like God.

C. *Punishment*. — All *punishment* is medicinal. When the soul which is united with the body has atoned for its sins, it will return to its original state. Some souls are redeemed in this world; others in the world to come—in hell. When the soul is redeemed, it is united again with its spiritualized body. Having returned to God, man may sin again, in which case the cycle of punishment, redemption, and purification is repeated. At the end of the world the universe will be transfigured into a state analogous to that of the risen body (Neo-Platonic cycle).

D. *Errors*.—Origen's principal errors are: the eternity and necessity of creation; the gradation of spirits due to sin; the pre-existence of souls; the unnatural and punitive union of soul and body; and the restoration of all things (*apokatastasis pantōn*). Origen's errors were hardly due to malice. He erred, but kept the Faith. His writings were used alike by friend and foe.

CHAPTER II

POST-NICENE PHILOSOPHY

114. St. Augustine.—**LIFE.**—Augustine was born on November 13, 354, at Tagaste in Numidia, and died as Bishop of Hippo on August 28, 430. His father was a pagan, but Monica, his Christian mother, had Augustine enrolled among the catechumens. In 371 he became a teacher of rhetoric in Carthage, and three years later joined the Manichæans in the same city. In 383 he went to Rome to open a school of oratory, but within a short time he was appointed a teacher of rhetoric in Milan, which was superseding Rome as the seat of government and the center of culture. In Milan, Augustine turned from the Manichæans to the Neo-Platonists, but neither with them did he find the truth he craved. He began to read Holy Scripture with a mind that was willing to be led, but with a heart which was attached to the world by every fiber. From the Scripture he now learned the two great truths, that Christ is our Saviour, and that it is His grace which gives the victory over the world. Augustine then went to Simplicianus, who in 397 succeeded St. Ambrose as Archbishop of Milan, and inquired what he must do in order to walk in the way of Christ. After a long struggle he quietly resigned his position as a teacher of rhetoric, and presented himself

to the archbishop as a candidate for baptism. St. Ambrose directed his instruction in the Faith, and baptized him on Holy Saturday in the year 387. In the following year Augustine returned to Carthage. He was ordained priest at Hippo in 391, consecrated coadjutor-bishop in 395, and installed as Bishop of Hippo in 396. He governed the diocese until his death. As Bishop of Hippo, St. Augustine lived a sort of community life with his priests. He preached frequently, had a special care for the poor, and used his leisure time for literary work.¹

The principal philosophical writings of St. Augustine are: *De Apto et Pulchro* (not extant); *Contra Academicos*; *De Vita Beata*; *De Ordine*; *De Immortalitate Animæ*; *De Quantitate Animæ* (on the relation of soul and body); *De Libero Arbitrio*. Of his theological works the following are the most important for philosophy: *De Vera Religione*; *Confessiones*; *De Civitate Dei*; *Retractationes*.

115. ST. AUGUSTINE AND GREEK PHILOSOPHY.—St. Augustine had an extensive knowledge of the ancient systems of philosophy, and the Middle Ages owed their own knowledge of them largely to him. The importance which he attached to dialectics for the explanation of the Scripture influenced the Schoolmen in their valuation of Aristotle's logic. St. Augustine was especially well acquainted with the writings of Plotinus and Porphyry, which he studied in Milan. He esteemed Plato very highly, but probably knew most of his writings only through Neo-Platonic sources. He cites Aristotle only three

¹ The account of St. Augustine's conversion given above is taken from his *Confessiones*, book VIII. For a complete list of his works see *The Catholic Encyclopedia*, II, 89 sq.

times, and does not seem to know his system.² From Neo-Platonism St. Augustine derived much of his psychology, his introspective method of research, his excessive distinction between the sensible and the supersensible, and certain doctrines about God. But he is not for this reason a Neo-Platonic philosopher, for in his hands Neo-Platonism loses its specific character and adapts itself to his genius. He rejects explicitly polytheism, the eternity of the world, metempsychosis, and especially the doctrine of fatalistic pantheism. He bends many theories attributed to Plato to the needs of his new theology.

116. PHILOSOPHY. — St. Augustine's philosophy centers about God: “. . . cum philosophis habenda est conlatio; quorum ipsum nomen . . . amorem sapientiæ proficitur. Porro si sapientia deus est . . . verus philosophus est amator dei.”³ St. Augustine's philosophy is an intimate fusion of intellectualism and mysticism. He states the relation of philosophy to revelation by saying that reason establishes the basis of faith, as it proves the existence and infallibility of revelation. Revelation, on the other hand, gives us knowledge of truths which reason could not even suspect.

117. (A) God.—St. Augustine proves the existence of God from the contingency of the world, from the order in the universe, from the testimony of consciousness, from the universal consent of mankind, and—his favorite proof—from the character of necessity and immutability which attaches to our concepts and to the first principles of thought and

² Of Aristotle he says: “Aristoteles, Platonis discipulus, vir excellentis ingenii et eloquio Platoni quidem impar, sed multos facile superans” (*De Civitate Dei*, III, 12).

³ *De Civitate Dei*, VIII, 1.

of ethics. Unity, perfection, infinity, eternity, and simplicity are attributes of God. Against Neo-Platonism, St. Augustine holds that creation cannot be from eternity. Against the Manichæans, he maintains that God is one, good, and infinitely perfect. In asserting that man is incapable of comprehending God and that God is above the categories, he modified Alexandrian views in an anti-pantheistic sense.

(B) *Theory of Exemplarism*.—God planned the universe, as an artisan plans his work. He knows all possible essences and their relation to His own infinite essence, of which they are imperfect imitations. The divine idea is the standard of the truth and the goodness of the creature. The divine ideas are the ultimate foundation of all contingent being, of its intelligibility, and of the certitude of human knowledge. The identification of the ideas with God corrects Plato's view that they have separate existence, and the Neo-Platonic view that they are a devolution of the One.

(C) *The World*.—In the beginning of time God created the world. Some things were created in their specific nature, others in their *rationes seminales*. The *rationes seminales* are a group of active principles, which God put into matter when He created it. They are formed according to the exemplar ideas, which correspond to material essences. In favorable circumstances they developed in matter, and thus living beings and many other objects in the world originated. There are as many *rationes seminales* as there are natural species of living beings.⁴

(D) *The Soul*.—The soul is a spiritual, immortal

⁴ See Woods, *Augustine and Evolution* (New York, 1925).

substance. (1) It is spiritual, because it has the power of perfect reflection and is present entire in every part of the body. The latter proof develops an idea of Plotinus. (2) The soul is immortal, because it is spiritual and participates in eternal, immutable truths. (3) As to the origin of the soul, St. Augustine hesitates between traducianism and creationism. Soul and body are two substances. (4) In the process of knowledge the intellect is illuminated by God: God is the sun of the soul, the light of our intelligence, the interior teacher of the soul. According to the view of most historians of philosophy of the present day, St. Augustine taught that intellectual cognition is effected by divine illumination of the human intellect, and in no wise is the effect of the action of objects upon the senses. This must be maintained at least with regard to the *species intelligibiles* of the first principles of thought, being, and ethics. (5) The primacy of the will follows from its control of the intelligence and of the inner sense, and from the necessity of good will for the acquisition of wisdom by means of the *ratio superior*. The mysteries of our Faith are accepted as true only by the intervention of the will. Conscience and moral responsibility prove the freedom of the will.

(E) *Ethics*.—Union with God is the last end and the supreme happiness of man. It is effected by the beatific vision, which is a supernatural state. Evil is not a substance, but the lack of moral good. Hence, evil has a deficient (*causa deficiens*), but not an efficient cause (*causa efficiens*). Everything is good in so far as it is. The intrinsic distinction between moral good and evil is founded on the divine

exemplarism. Moral evil is against nature, and hence against God, because it deprives nature of that to which it has a right.

118. HISTORICAL POSITION.—Among St. Augustine's original contributions to philosophy is the doctrine that human consciousness, certain of its own existence, is the surest foundation of knowledge. St. Augustine possessed an unsurpassed skill, keenness, and penetration in the observation and analysis of psychological phenomena. The doctrine of divine exemplarism is a correction of Plato's theory of the ideas. Christian philosophy and theology have received from the genius of St. Augustine more numerous and more profound contributions to the specifically Christian concept of God, the human soul, and the end and duty of man, than from any other single mind. Scholasticism is largely a systematization of the ideas of St. Augustine according to the method of Aristotle. The early Schoolmen, especially, drew from the writings of St. Augustine what they had of the spirit and content of ancient philosophy.

119. Nemesius (fourth century), Bishop of Emesa in Phœnicia, wrote the earliest Christian anthropology, entitled *On the Nature of Man*. His philosophy is principally Neo-Platonic. He teaches that the soul is a complete, essentially active, spiritual substance. All souls were created by God simultaneously in the beginning. It is difficult to reconcile the statement of Nemesius, that the soul is united with the body into one substance (the substance of man), with his theses that it does not undergo any change, and that it is in itself a complete substance. He illustrates his meaning by saying that the soul

is in the body as the sunlight is in the atmosphere. The soul is present entire in every part of the body. In sleep it separates itself from the body, but does not leave it entirely. Intellectual cognition is reminiscence. Since God has endowed man with intellect, He has given him also a free will.

120. Pseudo-Dionysius.—**HISTORY.**—The writings of Pseudo-Dionysius, the authenticity of which was contested from the beginning, probably originated in Syria. They are mentioned for the first time in a letter of Bishop Innocentius of Maronia, reporting a conference which took place in Constantinople in 531–533, and they originated toward the close of the fifth century. Their purpose is to utilize Neo-Platonism for Christian philosophy and theology. They gained prestige through the recommendation of several Popes. Their spuriousness was first recognized by Laurentius Valla, and later proved by Morin. From this time their influence rapidly waned. Albert the Great, St. Thomas, and others commented on them.

121. PHILOSOPHY.—The mystical union of the soul with God is the central theme of the philosophy of Pseudo-Dionysius. God has all the perfections of creatures: He is goodness, beauty, power, and unity. Because of His transcendence, God is to a certain degree ineffable, obscure, and not-being (Plotinus). All things are effusions of God, just as light is an effusion of the sun. God's Providence extends to all things. Between God and man there is a hierarchy of celestial spirits (treatise on *The Celestial Hierarchy*), of which the ecclesiastical hierarchy is a copy (treatise on *The Ecclesiastical Hierarchy*). God is also the purpose of all things. He draws

them to Himself. Having descended into the creature, the good returns to God. This return is regarded by some historians as deification, by others as the vision of God.

Pseudo-Dionysius is largely dependent on Proclus, whose pupil he may have been in Athens. This is probable because of the literary and doctrinal coincidences in their works. Thus, he teaches the return of the creature to God, and avoids concrete terms in determining the nature of God. He finds the culmination of human knowledge in the mystical intuition of God, in which the soul is passive. But the mysticism of Pseudo-Dionysius is supernatural, and therefore Christian. Though his expressions at times lend themselves to pantheistic interpretation, he is not a pantheist, because he distinguishes God and the creature as two different beings.

122. HISTORICAL POSITION.—For the Middle Ages Pseudo-Dionysius was one of the principal sources of Neo-Platonism. Copies of the Pseudo-Dionysian writings were known in the West in the eighth century. Pope Paul I sent a copy of them to King Pepin; Adrian I sent them to the Abbey of St. Denis. Louis the Fair also possessed them. Scotus Eriugena translated them into Latin, and commented on them in a pantheistic sense. In the thirteenth century they were translated by Robert Grosseteste. Maximus Confessor was one of the earliest students and imitators of Pseudo-Dionysius.

Part III

MEDIEVAL PHILOSOPHY ¹

INTRODUCTION

123. In so far as Medieval Philosophy is of importance for the history of Western thought, it comprises Scholasticism and certain Arabian and Hebrew philosophies. Scholasticism is a general term, including both Scholastic philosophy and Scholastic theology. Taking the Aristotelean conception of philosophy as a standard, Scholastic philosophy is a scientific explanation of the universe through its ultimate causes. Scholastic theology, on the other hand, is a scientific exposition of divine revelation. Therefore, Scholastic philosophy and Scholastic theology are not identical; they have different formal, and for the most part different material objects.

If a true definition, as Aristotle says, expresses the nature of the thing defined, Scholasticism can be defined only by summarizing its doctrines.

¹ See especially DE WULF, *Histoire de la Philosophie Médiévale* (5th ed., 2 vols., Louvain, 1925; English translation, New York, 1926).

As Du Cange shows in his dictionary of medieval Latin, the term *scholasticus*—which is the immediate ancestor of the English words “scholastic” and “scholasticism”—had two principal meanings. Firstly, it was the honorable name given to the head of a school. As education in the Middle Ages was entirely in the hands of the clergy, the name *scholasticus* was an ecclesiastical dignity. The heads of the medieval schools were not only versed in the liberal arts (the *trivium* and *quadrivium*), but also in philosophy and theology in so far as they were developed in their time. Hence they were men of culture and learning. Secondly, the name *scholasticus* was used in a wider sense as a title of honor given to scholars generally. In the age of the Renaissance the Humanists, ignorant of the doctrines and of the very nature of Scholasticism, converted this title of honor into an opprobrious name. They applied it to medieval philosophers and theologians in the sense of sciolist, sophist, and quibbler.

Possessing its own methods and principles, Scholastic philosophy was from the twelfth century distinguished from Scholastic theology as a distinct science. Yet it had both doctrinal and material relations with theology. Its doctrinal relation to theology consisted in its subordination to theology in the sense of the Patristic principle, that philosophy is the handmaid of theology. Its material relation to theology consisted in the fact that certain problems studied in Scholastic philosophy originated in theological discussions.

124. Division.—Medieval philosophy may be divided into four periods: I. *The Period of Preparation* (ninth to twelfth centuries); II. *The Classical*

Age (thirteenth century); III. *The Period of Decadence* (1300–1450); IV. *The Transition Period* (1450–1600).

125. Sources.—I. *Primary Sources*:—The works of the Schoolmen, of which scientific editions are gradually beginning to appear, *e.g.*, the Leonine edition of ST. THOMAS of which 14 volumes have appeared. The Franciscan house of writers in Quaracchi has published a model edition of the works of ST. BONAVENTURE (1882–1902) and Vol. I (1925) of the *Summa Theologica* of ALEXANDER OF HALES, besides many smaller texts and studies. BÄUMKER, *Beiträge zur Geschichte der Philosophie des Mittelalters* (25 volumes published); DE WULF AND PELZER, *Les Philosophes du Moyen-Age* (9 volumes published). Each of these two collections contains both texts and studies.

II. *Secondary Sources*:—DE WULF, *Histoire de la Philosophie Médiévale* (5th ed., 2 Vols., Louvain, 1925; English translation, New York, 1926); ÜBERWEG'S *Grundriss*, Vol. II, ed. BAUMGARTNER (10 ed., Berlin, 1915); GRABMANN, *Geschichte der scholastischen Methode* (2 Vols., Freiburg, 1909–1911); *Bibliothèque Thomiste* (8 Vols., published. Kain, 1921–1927); DENIFLE, *Chartularium Universitatis Parisiensis* (4 Vols., Paris, 1889–1897); KLIMKE, *Institutiones Historiæ Philosophiæ*, Vol. I (Rome, 1923).

Section I

THE PERIOD OF PREPARATION

(Ninth to Twelfth Centuries)

INTRODUCTION

126. Characteristics.—(1) *The subject matter of philosophy was gradually determined.* Some of the peoples of Western Europe were acquiring philosophical culture for the first time, and others were taking up again the heritage of ancient civilization which had once been their own, but which the vicissitudes of their political history had disrupted. All were working with meager resources. The store of their scientific knowledge was contained in the *Ety-mologies* of St. Isidore of Seville (about 560–636). On him depend St. Bede's (672–735) *De Rerum Natura* and Raban Maur's (784–856) work of the same name, which was the encyclopedia of the early Middle Ages. How vague the concept of philosophy was at this time, appears from the fact that Raban Maur terms the contents of his work "philosophy." A little earlier Alcuin (d. 804) had defined philosophy as "*naturarum inquisitio, rerum divinarum humanarumque cognitio, quantum homini possibile est aestimare.*" But progress was being made, for in the ninth century the School of Fulda divided philosophy into logic, physics, and ethics.

(2) *The problems of philosophy were gradually realized and stated.* Thus the problem of the universals brought up many metaphysical questions relating to God, the universe, and abstract being. Questions of cosmology and natural theology obvi-

ously presented themselves to the mind imbued with religion. Man's reflection on himself raised questions of psychology.

(3) *A lack of systematic unity in the philosophical thought of this period was caused by the attempt to blend incompatible sources.* The exclusively deductive method of St. Anselm and of Scotus Eriugena was due to Aristotle's logic. Elsewhere Aristotle's doctrine of matter and form was thoroughly misunderstood. He was regarded with suspicion, because he denies the Providence of God. Thus, the minds of the scholars of this time gravitated toward Plato, whose doctrine of God as the highest good seemed to accredit him. Fragments of Stoicism and political ideas of St. Augustine added to the store of their knowledge of ethics. In natural theology they proposed both the ontological argument and the proof from effect to cause.

(4) *A clear distinction between philosophy and theology began to be drawn in the eleventh century, and the elimination of incompatible elements was undertaken.*

127. Schools.—In the early Middle Ages there were three kinds of schools in which philosophy was taught. Most of the great educators of this period were Benedictine monks, who commonly taught in the monastery schools. These schools usually consisted of two departments, the one for the monks (*schola interior*), the other for externs (*schola exterior*). Cathedral schools were established by the bishops as early as the eighth century for the education of clerical students. The most celebrated court school was that of the Frankish kings, which was taught by ecclesiastics, but was open also to lay persons.

The courses taught in these schools were the *trivium* (comprising grammar, rhetoric, and logic), the *quadrivium* (comprising arithmetic, geometry, music, and astronomy), natural sciences, philosophy, and theology.

The early medieval schools were fairly numerous. Some of the principal ones were the monastery school at York, under Alcuin; the monastery school at Fulda, under Raban Maur; the monastery school at Bec, under St. Anselm; and the court school of Charlemagne. As early as the ninth century there were a number of schools in Paris, which became the intellectual center of the West in the thirteenth century.

128. Great Educators.—ALCUIN (about 735–804) was a native of Northumbria, England. He received his education in York under Egbert, who had been a pupil of St. Bede. In 778 he was head of the School of York, but in 781 Charlemagne induced him to undertake the reorganization of the palatine school, in which he labored until 790. In the last years of his life he lived in the monastery at Tours, the school of which he transformed into a model educational institution. A man of great learning, Alcuin was not however a creative mind. His achievements consist in the schools which he organized, the text-books which he wrote, and the direction which he gave to philosophy by putting it into the service of theology.

RABAN MAUR (about 784–856), the greatest pupil of Alcuin, was a native of Mainz. He was educated in Tours, taught in the School of Fulda, became abbot of the monastery, and archbishop of his native city. His main educational work was the organization of the German schools and the introduction of

the study of the liberal arts into the curriculum followed by clerical students.¹

129. Methods of Teaching.—The general use of the Latin language as the vehicle of teaching was a powerful factor for the formation of a uniform philosophical mind in the various parts of Western Europe, and it also gave an international character to the sciences taught in the schools, especially to philosophy and theology.

Two forms of instruction were in use: the *lectio* (or commentary on the text in the hands of the student) and the *disputatio* (or discussion in the form of question and answer). As the subject matter of individual problems was gradually systematized, a standard scheme of didactic exposition was also developed. According to this didactic method, the question to be studied was first stated; next, the reasons militating against the thesis were formulated; then, the thesis was repeated together with the source of the proof; thereupon, the proof was developed; and, finally, the objections were solved.²

130. Philosophical Works in the Libraries.—(A) **GREEK.**—Since few of the Western scholars of this time were sufficiently versed in Greek to read the works of their great predecessors in the original, they were obliged to have recourse to translations. At various times previous to the twelfth century, parts of Aristotle's logic came to the knowledge of the Christian scholars of the West in this period. They possessed his *Categoriæ* and *De Interpretatione*.

¹ Other great educators of this period, such as St. Anselm and Scotus Eriugena, will be studied in their places.

² In the *Summa Theologica* of St. Thomas these sections are always introduced by the phrase, *Utrum, videtur quod non, sed contra, respondeo dicendum, ad [obiecta]*.

tion in the translation of Boëthius already in the tenth century. In the eleventh century Notker Labeo translated parts of the *Organon* into German. The *Analytics*, *Topics*, and *Sophistic Arguments* came into use in the early part of the twelfth century in the translation of James of Venice, which was finished in 1128. From this time also dates the medieval distinction between the *logica vetus* (that is, the logical treatises known prior to the twelfth century) and the *logica nova* (that is, those parts of Aristotle's logic which became known in the twelfth century). From this it appears that the principal parts of Aristotle's philosophy—his metaphysics, physics, and ethics—were unknown during this period. However, some of his doctrines in these branches of philosophy were known through Boëthius and Chalcidius. But his philosophy as a whole was open to serious misunderstanding, because only fragments of it were known, and these only in the interpretations of minds which were often alien to his spirit.

Plato's *Timæus* was known in the translation of Cicero, and also in that of Chalcidius. In the twelfth century Plato's *Phædo* and *Menon* were made accessible in the version of Henricus Aristippus. The commentary of Chalcidius was in use together with his translation of the *Timæus*; but, as it contained many eclectic ideas, it served perhaps as much to obscure Plato as to make him known. The Platonic currents of early Scholasticism were also derived from St. Augustine, Boëthius, Pseudo-Dionysius, and other Greek writers, especially the Fathers of the Church.

I'orphyry's *Introduction to the Categories* of

Aristotle was used in the translations of Boëthius and of Marius Victorinus. The commentaries of Boëthius on various logical treatises of Aristotle also contributed much to furthering logical studies.

(B) LATIN.—The principal logical treatises used were those of Boëthius, Marius Victorinus, Martinus Capella, Cassiodorus, and Isidore. Cicero's *Topica*, *De Inventione*, and *De Officiis*, Seneca's *De Beneficiis*, and parts of Lucretius' *De Rerum Natura* were studied. But St. Augustine and the other Latin Fathers had a dominant influence on the philosophical thought of this period. From them was taken most of what this period possessed of cosmology, psychology, natural theology, and of the philosophy of history and of the State. Boëthius' *De Consolatione Philosophiæ* and several theological works of the same writer were widely read.

131. Martianus Capella (fifth century), who was not a Christian, exercised a great influence upon the studies of early Scholasticism through his *De Nuptiis Mercurii et Philologiæ*, which is an allegorical and didactic encyclopedia of the liberal arts, as studied in the *trivium* and the *quadrivium*. It was one of the principal factors contributing to the general adoption of this form of the organization of studies.

132. Boëthius (480-525), the Roman philosopher and statesman at the Court of Theodoric, conceived the plan of a complete translation of the works of Plato and Aristotle. He carried out only the smallest part of this vast design, but his influence on Scholasticism was very great. He is the main source from which the stream of the Aristotelean tradition flowed into early Scholasticism. Together

with Marius Victorinus, he is the pioneer translator of Aristotelean terms and definitions into Latin. He supplied the early Schoolmen with such Aristotelean concepts as becoming, substance, person, and cause. He gave them Aristotle's proof of the existence of God as the immovable mover. From him also they had many standard definitions (such as those of nature, person, and beatitude) and principles (such as that of the priority of the act over potency). The commentaries of Boëthius on Aristotle and on Porphyry were the models which the Schoolmen followed in similar works. From him they learned to analyze the text according to its sequence of ideas, to connect the study of problems with the exegesis of the text, and to make themselves independent of other commentators.

The treatise *De Consolatione Philosophiæ*, which Boëthius wrote in prison before his execution, expounds how the Providence of God directs all the vicissitudes of this life, even the gravest evils, to the highest good of man. This book transmitted to the Schoolmen a considerable body of Neo-Platonic thought in a brilliant form, which served to relieve their own dry exposition of logic. From it they took definitions of eternity, beatitude, Providence, fate, etc., and principles, such as "*cognoscens cognoscit per modum suum*," "*Deus stabilis manens dat cuncta moveri*," "*inserta est mentibus hominum veri bonique cupiditas*," etc.

In his theological treatises Boëthius utilizes philosophy to make clear the meaning of the content of revelation, to develop its proof methodically, and to refute errors and objections. His dialectical treatment of theological subjects, as well as other purely

theological particulars of method, became the model of the Schoolmen of a later age.

133. CASSIODORUS (d. 570) gave an exposition of the liberal arts in the second book of his *Institutiones Divinarum et Sæcularium Lectionum*. Although this work contains no new matter, it is important for the history of logic in this period, because it was among the sources used by St. Isidore of Seville, Alcuin, and Raban Maur.

CHAPTER I

THE NINTH TO ELEVENTH CENTURIES

§ 1. SCHOLASTIC PHILOSOPHY

134. The Problem of the Universals.—This problem did not arise spontaneously in the minds of the Schoolmen, but it was the fruitful source of the study of fundamental metaphysical and psychological questions. Porphyry and Boëthius led the Schoolmen to the study of the universals. Porphyry put the question, whether the genera and species exist in objects, or whether they are merely constructions of the mind. Boëthius vaguely says that they exist both in objects and also outside of them. He says that they are incorporeal by abstraction. Hence the first Schoolmen asked themselves whether or not the universals are objects. Those who answered in the affirmative professed a kind of exaggerated realism. This solution recommended itself to them, both because it seemed the more simple answer (according to which objects correspond to our concepts of them), and also because it seemed to offer the better solution of the theological doctrine of the transmission of original sin. The principal expounders of this form of exaggerated realism during this period of Scholastic philosophy are GERBERT OF AURILLAC (d. 1003), who in 999 became Pope Sylvester II, and ODO OF TOURNAI (d.

1113). Odo explains the transmission of original sin by monopsychism, and the creation of the individual soul as the addition by God of a new property to the soul.

With the exception of Scotus Eriugena, the exaggerated realists of this period must be classed as Scholastic philosophers, because they are explicit in rejecting the pantheistic consequences of their untenable theory. On the other hand they are not Platonists; for, while Plato maintains the separate existence of the ideas outside the corporeal world, they hold that the universals exist in objects.

135. Nominalism. — Another group of scholars taught that neither objects nor concepts, but only the terms by which we express them are universal. The originator of this view is a certain John, who has not yet been definitely identified, but who may have been the physician of King Henry I of England. Roscelin of Compiègne (born about 1150) was the principal advocate of nominalism in this form, which would probably not have attracted such attention, had he not applied it to the Trinity in a tritheistic sense. In 1092 the Council of Soissons compelled him to retract his explanation of the Trinity. St. Anselm and Abélard were the redoubtable opponents of Roscelin.

136. St. Anselm (1033–1109).—**LIFE.**—Anselm was a native of Aosta. He studied under Lanfranc in the Monastery of Bec, and later became head of its famous school and abbot of the monastery. In 1093 he was appointed Archbishop of Canterbury. His principal philosophical writings are the *Proslogium*, *Monologium*, *Liber Apologeticus ad Insipientem*, *De Libero Arbitrio*, and *De Veritate*,

137. PHILOSOPHY.—St. Anselm expresses the relation of philosophy to theology in the celebrated formulas, “*fides quærens intellectum*” and “*credo ut intelligam*.” The meaning of these formulas is that faith precedes reason, and that reason justifies faith and its object. St. Anselm proves the existence of God by the order in the universe, by the gradation of beings, by the participation of goodness and being, and by the ontological argument (*Proslogium*, II). His explanation of ontological truth, “*res sunt veræ quando sunt ut debent*,” recalls St. Augustine’s “*verum est id quod est*.” His statements about the divine light in cognition resemble those of St. Augustine, but he describes the process of cognition as abstraction. In psychology he teaches the essential difference between the sense and rational faculties, and that body and soul are two substances. The ethics of St. Anselm is mostly theological. He has St. Augustine’s doctrine of evil. He defines free will as “*potestas servandi rectitudinem voluntatis propter ipsam rectitudinem*.”

138. HISTORICAL POSITION. — St. Anselm is the father of Scholasticism, because he assembles so many of its fundamental doctrines. He made the first attempt to systematize Scholastic philosophy. He is the originator of Scholastic natural theology on a metaphysical basis, and also of Scholastic psychology. The early Franciscan school often sought the support of St. Anselm’s authority in philosophy and theology.

§ 2. PANTHEISM

139. John Scotus Eriugena (about 810-877).—
LIFE.—John was born in Ireland. From the land of his birth he was called Eriugena, and from his nationality John Scotus—Scotia being the common term for Ireland at this period. He was educated in the flourishing schools of Ireland, in which he became equally conversant with the Greek and the Latin languages. Before 847 Charles the Bald made him head of the court school in Paris. Pope Nicholas I complained to the king that Scotus' translation of Pseudo-Dionysius had not been submitted to him for ecclesiastical revision, and Hincmar of Rheims accused Scotus of heresy. With the death of Charles, Scotus disappears from history.

140. PHILOSOPHY.—Two periods are distinguished in the intellectual development of Scotus. During the first period his attention was given principally to the Latin writers, especially to St. Augustine. But his book *De Divina Prædestinatione*, which he wrote against Godescale at the suggestion of Hincmar of Rheims, is already imbued with Pelagian rationalism and Neo-Platonic pantheism. It was during this period also that he wrote his commentary on Martianus Capella. During the second period he was occupied principally with Greek philosophers and theologians. It was in this time that he translated the works of Pseudo-Dionysius (to which he also wrote a commentary), the *Ambigua* of Maximus Confessor, and *De Hominis Opificio* of Gregory of Nazianzus into Latin.

De Divisione Naturæ is the principal philosophical work of Scotus. It is a system of Neo-Platonic

pantheism, written in the form of a dialogue between teacher and pupil, and is based on the principle that God is the only being, and that all things are substantial emanations from Him. According to Scotus, there are four stages of the "divine process." He describes the first stage as "*natura, quæ creat et non creatur.*" This designates God as the cause of all being and not-being. "Being" is God Himself, and "not-being" is all which transcends our knowledge. The second stage is "*natura, quæ creat et creatur.*" It consists in the ideas, which subsist in God as the primordial causes. The "nothing," out of which Holy Scripture says that God created the world, is His own essence. The third stage is "*natura, quæ creatur et non creat.*" It comprises the beings which God created, and of which He Himself is the very essence. The final stage is "*natura, quæ nec creat nec creatur.*" It is God as the last end of all things. By this Scotus means the return of all things, both material and spiritual, into God. After this last phase of the "divine process," the cycle of emanation begins anew. Scotus further maintains that true religion and true philosophy are identical. Faith belongs to the earlier stages of the intellectual life, and leads up to reason. In the case of a conflict between reason and faith, the former must prevail.

141. HISTORICAL POSITION.—Scotus Eriugena is the father of the medieval philosophies which are opposed to Scholasticism, for he introduced pantheism and pantheistic mysticism into medieval philosophy. According to his teaching, the universal contains within itself and produces from within itself the particular, and things are real in proportion as they are

universal. Applying his theory of being to psychology, Scotus teaches that God reaches self-consciousness in man. Scotus is one of the great minds in the first period of medieval philosophy, because he produced the only complete and original system of this period. Yet it cannot be characterized otherwise than as a great error. *De Divisione Naturæ* is an attempt to reduce Catholic dogma to Neo-Platonism. Scotus practically reconstructed the philosophy of Proclus from secondary sources, and derived his own Platonism from Pseudo-Dionysius and Maximus Confessor. By his translations from the Greek, Scotus brought the Western mind into contact with the East.

§ 3. PHILOSOPHY AND THEOLOGY

142. Controversies. — In the early Middle Ages theological controversies gave rise to a number of philosophical problems. The controversy regarding the relation of free will and predestination led to the question of the relation of human liberty to the providence and the justice of God. The denial of transubstantiation brought about the study of the relation between substance and accidents, and suggested the study of the process of becoming. Roscelin's tritheism called forth an investigation of the concepts of nature, person, and individual.

A false and exaggerated dialecticism also made its appearance under the influence of nominalism. It began in the middle of the ninth and culminated in the eleventh century. This dialectical movement produced a group of sophists, who were worthy competitors of their predecessors in ancient Greece. Set-

ting up the principle that dialectics is the judge of all truth, even of supernatural revelation, they began to reduce the dogmas of the Church to dialectical formulas. Their leader, Berengarius of Tours, denied transubstantiation on dialectical grounds.

This false procedure resulted in an equally radical reaction, which stressed the subordination of philosophy to theology in the strongest terms. Thus, PETER DAMIAN went so far as to deny the absolute and universal validity of the principle of contradiction. He says that this principle is valid only in logic and in nature, but that it is subject to God, just as the laws of nature are subject to Him. Other opponents of exaggerated dialecticism minimized the value of profane science, including philosophy, but they did not go to the lengths of Peter Damian. Among them were numbered OTLOH OF RATISBON (about 1010–1070) and MANEGOLD OF LAUTENBACH (d. after 1103), the latter of whom acquired fame as an itinerant teacher in France and Germany. LANFRANC (about 1010–1089) followed the sane course of rejecting, not dialectics itself, but its abuse.

CHAPTER II

THE TWELFTH CENTURY

143. Exaggerated Realism. — The controversy about the universals burst into flame again in the twelfth century, and the discovery of the works of Aristotle which had been unknown until that time added fuel to the discussion. Two theories of exaggerated realism were current in the twelfth century. WILLIAM OF CHAMPEAUX (about 1070–1121), a teacher at the cathedral school in Paris, for a knowledge of whose doctrines we are dependent upon Abélard, taught the subsistence of the universals. Under the pressure of the objections of Abélard he repeatedly modified his theories. At first he had taught the identity of the essences of the individuals of a given species; later he held that the same essence has as many existences as there are objects in which it is found; and finally he was content with the similarity of essences of the same species of objects. While William of Champeaux taught the subsistence of the universals in objects, certain members of the School of Chartres, notably WILLIAM OF CONCHES (1080–1145) and the two brothers BERNARD (d. 1124/1130) and THIERRY OF CHARTRES (d. about 1150), taught the subsistence of the universals outside of objects in the sense of the ideas of Plato. William of Conches devoted much attention to prob-

lems of psychology and natural philosophy. The presence of a number of Aristotle's physical doctrines in the writings of William of Conches and of GILBERT DE LA PORRÉE has suggested that the Latin translation of Aristotle's *Physics* made by Gerard of Cremona between 1125 and 1140, or Gundissalvi's translation of Avicenna's commentary on this work of Aristotle's, was in use in the School of Chartres in the middle of the twelfth century. William of Conches is the author of one of the few ethical treatises of the early Middle Ages, which is based on Cicero's *De Officiis* and Seneca's *De Beneficiis*.

The School of Chartres was remarkable for its study of problems of natural philosophy, a tendency which seems to have been due to Plato's *Timæus*. Prominent among the members of this school are, besides those already mentioned: OTTO OF FREISING, who was the first to acquaint his countrymen with the *logica nova*; JOHN OF SALISBURY, ALAN OF LILLE (Alanus ab Insulis), whose connection with Chartres however is merely intellectual, and ADELARD OF BATH.

144. Opponents of Exaggerated Realism. — Educated at Laon and Tours, ADELARD OF BATH made extensive voyages, which took him as far as Greece, to enlarge the field of his knowledge. He endeavored particularly to make the West acquainted with the science of the Greeks and Arabs. His philosophy is found in the treatise *De Eodem et Diverso*, which he wrote between 1105 and 1116. He seeks to conciliate Plato and Aristotle on the question of the universals. With Aristotle he holds that they are immanent in objects, and with Plato he maintains that they exist in their pure form only in the divine intellect. He seeks to conciliate these two interpreta-

tions by means of the doctrine of indifference, which is the second form of the theory of William of Champeaux. He inferred that animals possess an immaterial soul, because they are endowed with sense life. Under the influence of Plato, he taught that the soul and the body of man are two substances, and that their union is violent and unnatural.

WALTER OF MORTAGNE (d. 1174) taught that the same objects are individuals, or species and genera, according to the point of view from which they are considered.

145. Abélard (about 1079–April 21, 1142).—LIFE.—Abélard taught dialectics at Melun, Corbeil, and Paris, where his opposition forced William of Champeaux, his former teacher, to modify his exaggerated realism. Then he studied theology under Anselm of Laon, and taught this science at the cathedral school in Paris. After his affair with Éloïse—in which philosophy has no interest—he taught at Nogent on the Seine, where he also built a house, which he called “The Paraclete.” In 1121 the Council of Soissons condemned his errors on the Trinity. From 1136–1140 he taught again at St. Geneviève near Paris, where John of Salisbury was among his pupils. In 1141 the Council of Sens condemned his errors on the Trinity and the Incarnation. He spent the last two years of his life in the Monastery of Cluny.

146. PHILOSOPHY.—Abélard owes his position in the history of philosophy to his *sic-et-non* method and to his ethics. His book entitled *Sic et Non* is a collection of apparently contradictory statements on subjects of dogmatic theology. Its purpose is to provide material for the study of dialectics. The

seeming contradictions are to be reconciled by means of distinctions of terms, time, and circumstances. This method of reconciling apparent contradictions is not original with Abélard. Before his time it was employed by canonists like Bernold of Constance, Cardinal Deusdedit, Ivo of Chartres, and by Irnerius of Bologna. But it owes its diffusion in the schools of philosophy and theology to Abélard. His use of it became the model of the authors of the *Summæ* and of other scholars of the thirteenth century. In metaphysics Abélard gathered together the principal theses of Boëthius. He also taught St. Augustine's doctrine of the ideas, Plato's doctrine of the world-soul, and a false theory of matter and form. Abélard's theory of the universals is moderate realism. Abélard is one of the principal moralists of his time, because he attempts rational solutions of ethical problems. He defines free will as the power of doing without necessity what reason has resolved. The moral precepts of the Gospel, he ambiguously claims, are identical with natural law. He further says that the morality of acts depends exclusively upon the intention of the agent, and consequently he denies the intrinsic distinction between moral good and evil.

147. HISTORICAL POSITION.—The *sic-et-non* method prepared the didactic methods of the thirteenth century. Abélard's high estimation of pagan science and literature prepared the way for the favorable reception of the works of Aristotle in the thirteenth century. The prestige which Abélard's fame gave to the doctrine of moderate realism, levelled the way for its general acceptance in the classical age of Scholasticism.

148. Hugh of St. Victor (1096–1141), of the family of the Counts of Blankenburg, was educated at Hamersleben and in the school of the Monastery of St. Victor in Paris, where he taught from 1125 and was head of the school from 1133. His principal writings are the *Didascalion*, *De Unione Corporis et Animæ*, and *De Sacramentis Christianæ Fidei*.

The *Didascalion* is an unfinished classification of the sciences, which Hugh divides into theory, practice, mechanics, and logic. Logic is the indispensable instrument of scientific study. The universal is formed by the action of the mind upon the sense representation, which is in the imagination. In natural philosophy Hugh teaches the atomistic constitution of matter in the sense of Democritus. The essences of things do not perish; the change we observe is merely a change of form. In psychology Hugh proves the substantiality, immateriality, and spirituality of the soul from its reflex consciousness. Man is a person because he has a spiritual soul. The body shares the personality of the soul by being united with it.

149. John of Salisbury (1110/1120–1180) was educated in France. Among his famous teachers were Abélard, Robert of Melun, William of Conches, Gilbert de la Porrée, and Robert Pulleyn. He lived in England until he was appointed Bishop of Chartres in 1176.

His earliest work, entitled *Entheticus*, is a history of Greek and Latin philosophy in verse. His *Politicus* is the first important theory of the State written in the Middle Ages. His *Metalogicus* is an exposition of eight theories of the universals. He inclines to the theory of

Gilbert de la Porrée. The universals are formed by abstraction, and therefore they are products of the mind. But they have objective value, because they agree with the objects which they represent. Yet John combines considerable scepticism with his assertions, because he had often found the proofs of acceptable theories to be untenable. He gives to Aristotle the standard title, "the Philosopher," which became current in the following century, but chides him in many things. His theory of social ethics is the first of its kind in the Middle Ages. His source for it is the Pseudo-Aristotelean *De Institutione Principis*.

150. Gilbert de la Porrée (1076–1154) was one of the principal members of the School of Chartres. On the question of the universals he teaches what is in substance the moderate realism of the thirteenth century. Gilbert's *De Sex Principiis* is an original, but hardly successful study of the last six categories of Aristotle. In psychology he considered the soul as a quality. In God he distinguished nature and person by a real distinction, an error for which he was called to account by the Council of Rheims in 1142. Among Gilbert's pupils was OTTO OF FREISING (b. 1114/1115; d. 1158), whose *Chronicon sive Historia de Duabus Civitatibus* is the most important philosophy of history which the Middle Ages produced. Otto ascribes a high cultural value to philosophy, and delights in philosophical digressions in the midst of historical narrative. Even if Otto is not, as some historians hold, a pupil of Gilbert, he was strongly influenced by him, for Otto's history reflects Gilbert's ideas, and among the many eminent men whose lives he records none receives such ex-

tensive and sympathetic consideration as Gilbert. Gilbert is the first of the Schoolmen to develop the theory and technic of the Scholastic *Quæstio*. He gives detailed and systematic directions for propounding philosophical problems by presenting the arguments for and against them, and for solving them by means of dialectical distinctions disclosing the flaws in untenable proofs. Gilbert also applies his theory of the *Quæstio* for the first time to theological subjects, though this is done somewhat timidly and always on the basis of the Catholic Faith. His theological science is merely another form of St. Anselm's "*credo ut intelligam*." ¹

151. Alan of Lille (Alanus ab Insulis, 1128-1203), one of the most remarkable men of this period, was educated in Paris and Chartres. He became a brilliant teacher in Paris, but in the midst of his success he abandoned his career and became a monk in the Cistercian abbey in Cîteaux. In his own time he was termed Alan the Great, and posterity has given him the honorable title of *Doctor Universalis*.² Alan is the typical representative of Scholasticism in its best form at the end of the twelfth century. Although Alan is not an original mind, he is an unusually able exponent, by means of the syllogistic method, of the best achievements of the Schoolmen up to his time. The thirteenth century took over from him the consequent and general application of this mathematical, deductive method. His general metaphysics contains a series of highly important Aristotelean elements, such as the doctrine of

¹ JOHN OF SALISBURY has a splendid character sketch of Gilbert in his *Historia Pontificalis, ad annum 1156*.

² The custom of applying honorary scholastic titles to eminent philosophers and theologians began about this time.

substance and accident, matter and form, the four causes, and the theory of becoming. He worked out in their precise formulation a number of important concepts, such as nature, accident, and person, in the sense in which they are the common heritage of the Schoolmen. Alan also contributed to Scholastic philosophy the general definition of cause and several of the standard axioms regarding causality, and introduced the concepts of instrumental and occasional cause. Among the arguments which Alan adduces to prove the spirituality of the soul, which according to him originates by creation, are the capacity for knowing the spiritual and voluntary motion. He proves the immortality of the soul from its simplicity and spirituality. Body and soul, he teaches, are two substances; the body is the garment, dwelling, shell, or vase of the soul. Without evidencing material progress, the natural theology of Alan covers the principal parts of the Scholastic doctrine. Alan formulates his theses briefly and precisely, and proves them by short syllogisms.

152. Anti-Scholastic Currents.—Just as philosophy and theology were intimately connected in the Middle Ages, so too anti-Scholastic doctrines were usually associated with heresy. The Cathari and the Albigenses held the Manichæan doctrine that there are two first principles: God, the author of the good, and an independent first principle of evil. The Cathari also denied the spirituality of the soul.

Several philosophical doctrines were associated with these heresies. BERNARD OF TOURS propounded a strange system of Neo-Platonism in his *De Mundi Universitate*, written about 1150, which is a dialogue between nature and the *Nous* after the manner of

the *Satyricon* of Martianus Capella. The human soul is an emanation from God, and matter is the cause of evil. AMALRIC OF BENA (d. about 1206), professor of theology in Paris, taught that God is the very essence of the creature. "All things are one; for whatever is, is God." The followers of Amalric taught a threefold manifestation of God: the incarnation of the Father in Abraham, that of the Son in Christ, and that of the Holy Ghost in every individual person. DAVID OF DINANT, of whose life practically nothing certain is known, held that God is the *materia prima* of all bodies.³

These scholars must be classed as anti-Scholastic, because their doctrines are incompatible with the fundamentals of Scholasticism.

153. Contact with Theology.—The contact of philosophy with theology consisted not only in the fact that the theologians were also philosophers, but in the problems (such as the nature and existence of God) which were common to both sciences, and in the application of the dialectical or philosophical method to theology.

The attitude of the theologians toward the application of the dialectical method to theology was determined partly by their own judgment on the nature and value of profane science, and partly by the actual results in the immediate past of the use of the philosophical method in theology. They had in mind the errors of the philosophers in doctrinal matters, the heresies which arose from them, and the disruption of morality caused by them.

The so-called dialectical theologians recognized philosophy as an independent science, and made use

³ Cf. ST. THOMAS, *Summa*, I, Q. iii, a. 8.

of the dialectical method for the exposition of theological problems and for the organization of the subject-matter of theology. They proved the doctrines of theology from the sources of revelation. The theological *Summæ* originated among the dialectical theologians. As the name of a literary form, the *Summa* originally designated a systematic exposition of a science. Thus, there were Biblical, moral, and especially canonical *Summæ*. However, from about the year 1200 this title was reserved for systematic expositions of dogmatic and moral theology.⁴ To this group of theologians belong ROLAND BANDINELLI (Pope Alexander III), RADULFUS ARDENS, ROBERT OF MELUN, and others.

A second group of theologians rejected altogether the use of philosophy in theology. They judged philosophy by its abuses rather than by its fruitful use. Among this group are PETER DAMIAN, WALTER OF ST. VICTOR, STEPHEN OF TOURNAI, and others.

Finally, there was a third group, who utilized philosophy for the exposition of theology, but denied its independent scientific character and value. Among their number are PETER OF POITIERS, SIMON OF TOURNAI, PRÆPOSITINUS, GANDULPH OF BOLOGNA, and especially PETER LOMBARD, called the "Master of the Sentences" (*Magister Sententiarum*). These

⁴ The *Summa Abel* of PETER CANTOR (d. 1197) and the *Summa Britonis* of ADAM OF ST. VICTOR (d. 1192) are examples of Biblical *Summæ*. There were numerous *Summæ de Vitiis et Virtutibus*. The *Summa de Creaturis* of ALBERT THE GREAT and the *Summa contra Gentiles* of ST. THOMAS are predominantly philosophical. The great *Summæ* of the thirteenth century are designed as complete and systematic presentations of their subjects. Among the principal sum-mists are ALEXANDER OF HALES, WILLIAM OF AUXERRE, ST. THOMAS AQUINAS, ALBERT THE GREAT, ULRIC OF STRASSBURG, and HENRY OF GHENT. Their works are principally dogmatic, although dog-matic and moral theology were not at this time separated.

men belonged to the old school of the *Sententiarii*, or writers of Sentences. The Sentences were collections of doctrinal texts taken from the Fathers and other ecclesiastical writers. As collections of dogmatic texts, their origin goes back to the *Liber Sententiarum ex Operibus S. Augustini Delibatarum*, written by Prosper of Aquitania about the year 450, and to the *Florilegia* of the ninth and tenth centuries.⁵

⁵ Among the other literary forms developed by the Schoolmen are the *Sophismata* (which are problems in logic), the *Quodlibetalia* (which are the Master's solutions of the questions discussed in the Christmas and Easter disputations), and the *Quæstiones Disputatæ* (which are full discussions of important questions in philosophy and theology given by the Master every week or every two weeks).

CHAPTER III

CONTACT WITH THE EAST

§ 1. THE PHILOSOPHY OF THE ARABS¹

154. Origins. — The Arabs extended their researches to the entire field of philosophy, and their efforts to solve the problems it presented to them were no less intense than those of the Schoolmen. The Arabs were not so successful as the Schoolmen in solving philosophical problems, but the fruit of their researches proved to be valuable material for use in the formation of the Scholastic system. Some of this material was incorporated into Scholasticism, and some of it served as a warning against the pursuit of unfruitful or of dangerous avenues of thought. Until the final history of the philosophy of the Arabs is written, the full value of their work and the extent of their influence upon the Schoolmen cannot be definitely estimated.

The philosophy of the Arabs began with translations of parts of Aristotle's logic, which they received from Syrian Christians in the seventh century. Their religious sense was troubled by Aristotle's dualism of God and the world as two eternal and independent principles. The metaphysical development of Arabian philosophy was determined by their erroneous belief that in the emanatism of the

¹ HORTEN, *Das Buch der Ringsteine Farabis* (BÄUMKER, *Beiträge*, V, 3, Münster, 1906).

Theologia Aristotelis, which they accepted as genuine, Aristotle himself had indicated the way to bridge over the chasm between God and the world.² On the ground of this false assumption, the Arabs grafted Neo-Platonic emanatism on Aristotle's philosophy by teaching the emanation of a graded series of intelligent spheres from the *motor immobilis* as the source of the motion of the universe. The central problem of the philosophy of the Arabs was the metaphysical reconciliation of the revealed doctrine that God created the world, with the apparently well-established doctrine of Aristotle that matter had no beginning. Thus originated their theory of an eternal creation (*creatio ab aeterno*), which was met with resolute opposition by their own theologians.

155. Chronology.—The philosophy of the Arabs is divided into five periods:

I. The period of translations (ninth and tenth centuries), with Alkindi as its principal representative;

II. The influx of Greek and Neo-Platonic philosophy (tenth and eleventh centuries), with Alfarabi as its principal representative;

III. The criticism of the Greek systems and their assimilation into the Moslem world-view, with Algazel as the principal representative;

IV. The period of discussion and development (Averroës);

V. Modern Arabian philosophy.

156. Classification.—The Arabian systems of philosophy are divided into three groups: (1) *Dogmatic systems*, which center about God as an infinitely

² The spuriousness of this work has long been recognized. It is an excerpt from Plotinus' *Enneads IV-VI*.

perfect being, who creates and conserves the world (the Mutakallimun); (2) *Empiric systems*, which take the world as their point of departure and culminate in God, from whom the world emanates; (3) *Mystic systems*, with a tendency to deny the reality of created being, and to assert the pantheistic identity of all things with God. The philosophical material which finds expression in these systems was contributed by Greek and Neo-Platonic philosophy, Nestorian Christians, native Arabian thought, and Buddhism.

157. Characteristics.—(1) The Arabian philosophers had the highest regard for Aristotle, but their initial error of accepting the so-called *Theologia Aristotelis* as genuine led them to misinterpret his system. (2) Arabian philosophy is syncretistic, deriving its material from the sources mentioned above. Its outstanding doctrines are the emanation of the spheres and the unity of the active intellect. (3) The Arabian philosophers endeavor, sometimes by strained expedients, to conciliate their teaching with the Mohammedan religion.

158. Alkindi (d. about 870) was a native of Bosra, and among his own people was called "The Philosopher of the Arabs." Little is known about his philosophy. He is the earliest Aristotelean among the Arabs, having translated parts of Aristotle's logic into Arabic. He suffered religious persecution because he accepted Aristotle's view that matter had no beginning. On account of the primitive character of his thought, his theories were soon supplanted by those of Alfarabi.

159. Alfarabi (d. 950) was educated in Bagdad. He taught in that city, and also in Aleppo and Da-

masceus. He proves the existence of God by the causal series and by the relation of multiplicity to unity. Since the world is contingent and composite, it requires a cause, which is God. God is an uncaused, eternal, personal being, the last end of all things. God knows the world, because He knows His own ideas, which caused it. This knowledge does not effect change in God, for the ideas are eternal. The world does not cause the knowledge which God has of it. The world is the work of God in so far as He actualized it in matter, which had no beginning. Alfarabi accepts Aristotle's teaching that matter has not become, and also his proofs drawn from the eternity of movement and from the nature of the heavenly bodies. There is only one active intellect, for spirit has no principle of individuation and multiplicity. Happiness, the end of human existence, is attained by union with God.

HISTORICAL POSITION.—Alfarabi seeks to combine Neo-Platonic emanatism with Aristoteleanism. He is the founder of the scientific philosophy of the Arabs. He definitely introduced into Arabian philosophy the doctrine of the one separate active intellect. Avicenna depends on him, and Christian philosophers also have taken certain of his teachings. Albert the Great uses his proof of the existence of God.

160. Avicenna (980-1037), a native of Kahrmatan, after a varied career as a physician taught philosophy at Ispahan in Persia. His general tendency was to eliminate from Arabian philosophy the Neo-Platonic elements which Alfarabi had introduced into it. In physics he taught Aristotle's hylomorphism. In the place of the Neo-Platonic emanations

he puts a graded series of astronomical intelligences, each of which is caused by the next higher one. Man has a spiritual and immortal soul. Intellection takes place by the mind's contact with the active intellect, which is a separate being. The world is eternal, but caused by God, who is uncaused. Matter also is uncaused. God caused the forms of matter through an intelligence, which is called the giver of forms (*dator formarum*). After death the reasonable soul attains perfection by receiving in itself the form of well-being and harmony, which pervades the superior essences.

HISTORICAL POSITION.—Avicenna's position is determined by his endeavor to remove from Arabian Aristoteleanism the Neo-Platonic elements which his predecessors had introduced into it, and by his precise and systematic formulation of Aristotle's philosophy as he understood and interpreted it. Because of this methodical exposition of Aristotle, his writings were considered as models for imitation throughout the Middle Ages. In collaboration with other scholars JOHN AVENDEATH (ABRAHAM IBN DAUD), the Jewish translator, rendered Avicenna's logic and parts of his physics and of his treatise on the soul into Latin about the year 1150.

161. The Mutakallimun.—This was an anti-Aristotelean sect of orthodox Mohammedan theologians founded in the tenth century. They taught that God created the universe and matter out of nothing, and that consequently time and movement are not eternal. In order to maintain the independence of God's power from the laws of nature, they asserted that the conservation of the world by God is a series

of creative acts. The defects of their argumentation, as compared with the dialectical skill of the philosophers, led later Arabian philosophers to accept the eternity of matter and of the world again. For a time the Mutakallimun brought the philosophers into discredit among the Mohammedans, but the adherents of Aristotle's philosophy took little notice of them until Algazel, whose dialectics and erudition were equal to their own, appeared upon the scene.

162. Algazel (1059–1111).—Algazel, who taught principally in Bagdad, is a typical anti-philosophical theologian. He combated the Arabian Aristoteleans, not only because of their errors, but also in order to put mysticism into the place of philosophy. He was particularly opposed to their doctrine of the eternity of the world and its emanation from God, the central parts of their system. He explains causality (somewhat in the sense of Hume) as the psychological expectation of succession, originating from habit. He rejects every law of nature and of thought. He declares sense evidence untrustworthy. In the end he sought to stifle the longing of his own mind for truth and knowledge by devoting himself to ascetic contemplation and the wild conceits, mystic dances, and ecstasies of Sufism. In Mohammedan theology he holds single-handed a position corresponding to that of St. Augustine and St. Thomas in Catholic theology. One of his works, entitled *Destructio Philosophorum* (*Destruction of Philosophers*), did its work only too well. It dealt Arabian Aristoteleanism a blow from which it never recovered in the East. It was left for Averroës to carry

on the tradition in the West and to bring it to culmination.³

163. Averroës (1126–1198).—Averroës was a native of Cordoba in Spain. For many years, besides cultivating philosophy, he was a physician and a judge. During the last years of his life he was accused of promoting the science of the ancients to the detriment of the Mohammedan religion, and deprived of his office. His principal philosophical works, which were written in Arabic, are the *Destructio Destructionis* (against the *Destructio Philosophorum* of Algazel), *Quæsitæ in Libros Logicæ Aristotelis*, *De Connexione Intellectus Abstracti cum Homine*, *De Animæ Beatitudine*, *De Substantia Orbis*, and several treatises on problems of Aristotle's *Physics*.

PHILOSOPHY.—(A) *God and the World*.—Averroës taught the intelligence, emanation, and regular gradation of the spheres. All forms are a series of emanations, which have their principle in God. God is the prime mover, who formed the universe by extracting the forms from matter, which is co-eternal with Him and independent of Him in existence. God does not know individual objects, and consequently exercises no providential care over them. The becoming of substance consists in the extraction by the active intellect of the forms contained in the potentiality of matter.

(B) *Monopsychism*.—The active intellect is the principle of human cognition. It is the last and least perfect of the emanations, an immaterial and eternal principle, distinct and separate from man. It is one

³ For a much more favorable view of Algazel see GRABMANN, *Die Philosophie des Mittelalters* (Berlin, 1921), pp. 21 sq.

and the same for all men, for immaterial beings have no principle of individuation and multiplicity. Hence there is no personal immortality. The passive intellect which Averroës attributes to the human soul, is identical with the *vis cogitativa* of the Schoolmen. It is an organic faculty, which ceases in death. Just as matter contains the forms of all things extracted from it by the active intellect as the principle of movement, so too the process of intellection consists in the eduction of the *species intelligibilis* from the fantasm by the *intellectus separatus*. Since the *species intelligibilis* is spiritual, the *intellectus separatus* is its subject. This intellect is therefore active as forming the *species*, and passive as being its subject. Under this aspect of passivity, the *intellectus separatus* is united *accidentaliter* with man by the very process of abstracting the *species intelligibilis* and for the duration of this process. Thus, man has intellectual cognition by this participation of the *intellectus separatus*—a participation which is termed *intellectus adeptus*. Differences in degree and in objects of knowledge result from differences of fantasm. Happiness, which is the end of man, consists in the knowledge of the separate intelligences. This is possible for man because of the active intellect's connection with them. The intelligible in the sensible is the proximate object of human knowledge.

(C) *Philosophy and Religion*.—Religion precedes philosophy, for it is only by subjecting himself to the Law and to religion that man can obtain an insight into the good. The literal sense of the Koran is for the rabble; the philosopher interprets it in a higher, allegorical sense. However untrue religious

doctrines may be in themselves, they must be taught and accepted, because they are the only road to philosophy. Philosophy, however, is entirely independent of religion and revelation (doctrine of the double truth).

HISTORICAL POSITION.—Averroism was the most formidable intellectual foe of Christianity in medieval times. It found many adherents in the universities. The doctrine of the double truth and of the monistic intellect survived until the seventeenth century. Averroës followed Aristotle so closely and blindly that his critics termed him “Aristotle’s ape.”

§ 2. THE PHILOSOPHY OF THE JEWS ⁴

164. Origins.—The Jews were disciples of the Arabs and followed their lead in adapting Greek thought to their intellectual and religious needs. The study of Neo-Platonism and of Aristotle led to the application of these philosophies to Jewish theology. Thus the metaphysical systems of medieval Jewish philosophy were formed. The Jews did not get the doctrines of Aristotle in their pure form. They gradually picked up the wealth of Aristotelean material as transmitted and interpreted by the Arabs, and also absorbed ideas and principles from other schools.

Medieval Jewish philosophy developed in three directions: the CABALA,⁵ with its esoteric emanatism; AVICEBRON, with various Neo-Platonic tendencies;

⁴ NEUMARK, *Geschichte der jüdischen Philosophie des Mittelalters nach Problemen dargestellt*, Vol. I (Berlin, 1907); HUSIK, *A History of Medieval Jewish Philosophy* (New York, 1916).

⁵ As represented by Saadia.

and MAIMONIDES, who utilized the philosophy of Aristotle for the explanation and defence of Judaism.

165. Saadia (892-942).—A native of Fayoum in Egypt, Saadia became the head of a Jewish Academy at Sura in Babylonia. He is the pioneer and pathfinder, not only of Jewish religious philosophy, but also of Jewish science in general. He proceeds from the principle that natural and revealed truth cannot contradict each other, because both come from the same source. He proves the existence of God from the finiteness and the composition of the world. He rejects the eternity of matter, because, if it were co-eternal with God, it would not be subject to Him. The principal attributes of God are life, omnipotence, and omniscience. The human soul is a substance, which God creates when the body comes into being. Saadia is opposed to the Neo-Platonic view that matter and body are evil as such. The soul of man is immortal. Free will follows from the existence of the divine law.

166. Avicbron (Solomon Ibn Gabirol, about 1020-1070).—**LIFE.**—Avicbron was born at Malaga, and educated in Saragossa. His principal philosophical work is the dialogue, *Fons Vitæ*. The Arabic original is lost, but the Latin translation made by Avendeath and Dominic Gundissalvi is extant.

PHILOSOPHY.—(A) All things except God, both corporeal and spiritual beings, are composed of matter and form. (B) God is too far removed from the material world to be its cause. Hence, the existence of the corporeal world proves the existence of beings intermediate between God and the world.

These intermediate beings are spiritual substances, which emanate from one another, but are not physically distinct from one another. (C) Spiritual substances are composed of matter and form, because they are the cause of these constituents in corporeal substances. Subsistent forms are impossible, for the vast difference between God and creature demands that God alone be an absolutely simple being. (D) The world-soul, which is composed of *materia universalis* and *forma universalis*, is the product of the divine Word or Will. The latter is described as "virtus divina faciens materiam et formam, et ligans eas, et diffusa a summo usque ad imum, sicut diffusio animæ in corpore; et ipsa est movens omnia et disponens omnia."⁶ (E) All things strive for the *prima essentia*: "Omne quod est, appetit moveri, ut assequatur aliquid bonitatis primi esse."⁷ As to God, we can know only His existence, not His nature. Creation is the emanation of a series of forms from the *essentia prima*.⁸ Among the attributes of God are eternity, knowledge, wisdom, and mercy.

HISTORICAL POSITION. — Avicbron's philosophy contains many characteristics of Neo-Platonism. The transcendence of the *essentia prima* resembles that of the One in the philosophy of Plotinus, as do the doctrines of the unknowableness of God, of emanation, of the gradation of the emanations, of the world-soul, and of the composition of all things of matter and form. The will as the cause of all things recalls Philo's *Logos* doctrine. The doctrine of matter and form pervades the whole system of

⁶ *Fons Vitæ*, V, 38.

⁷ *Ibid.*, V, 32.

⁸ Cf. *Ibid.*, III, 2 (11), with V, 41.

Avicbron, and he presents many original arguments to prove it. The doctrine that the conceptual and the real orders are parallel, is the initial error of his system.

Dominic Gundissalvi introduced certain of Avicbron's doctrines among the Schoolmen, such as the hylomorphic composition of all created substances, matter as the principle of multiplicity, the form as the principle of unity. The Early Franciscan School favored Avicbron. Duns Scotus, the founder of the Aristotelean Franciscan School, explicitly says that he returns to the position of Avicbron in his theory of the hylomorphic composition of all created substances.⁹ St. Thomas' treatise *De Substantiis Separatis* is a controversial work directed against Avicbron's doctrine of the hylomorphic composition of all creatures. The Angelic Doctor's *De Ente et Essentia* is directed also against Avicbron's theory of the plurality of forms. St. Thomas repeatedly took the opportunity to combat Avicbron's view that corporeal beings have no principle of activity and movement. The Jews of his own time neglected the philosophy of Avicbron, perhaps because he takes no Jewish attitude, and because his exposition is prolix and dry.

167. Moses Maimonides (1135–1204), a native of Cordova in Spain, was compelled by Mohammedan persecution to live in exile. He lived first at Fez and later at Fostat in Egypt. His principal philosophical work is the *Guide for the Perplexed*.

PHILOSOPHY.—(A) Maimonides' extension of the allegorical sense to the whole Scripture is often fatal to his intent and an evasion of difficulties. (B) His

⁹ *De Rerum Principio*, VIII, 4.

main proofs of the existence of God are the arguments from movement and from the possible and the necessary. (C) The only true attributes of God are the negative ones. Jahwe is the real name of God, but its meaning is unknown. This is the Neo-Platonic view of the transcendence of God, which many of Maimonides' predecessors had adopted. (D) The movement of the celestial spheres cannot be natural, for, if it were so, they would stop when they come to their natural place. The only way to account for their continuous circular motion is to suppose that the spheres are endowed with intellect. God is the object of the conception which the spheres strive to attain by their circular motion. The love of God, to whom the spheres endeavor to become similar, is the cause of their motion. So far as the spheres are bodies, they can accomplish this only by circular motion; for this is the only continuous act possible for bodies, and is the simplest of bodily motions. However, since there are many spheres, having different kinds of movement, which vary in speed and direction, Aristotle thought that this difference was due to the difference in the objects of the conceptions of the spheres. Hence he posited as many separate intelligences as there are spheres. What Aristotle calls intelligences, the Scripture terms angels. (E) Reason cannot prove that the world had a beginning, nor is the doctrine of the creation of the world out of nothing, considered from a purely philosophical point of view, an impossibility or a contradiction. From revelation it is certain that God created the world out of nothing. From the purely philosophical point of view, it is more probable that the world

was created than that it was not created. (F) Evil is the negation of the good. Hence, evil as such has no cause. (G) Man alone of all beings on earth enjoys the individual Providence of God. All other beings are ruled by chance. (H) By knowing Himself, God knows everything else before it comes into being, for His knowledge is the cause of the becoming of all things. (I) Maimonides proves the freedom of the will by appealing both to Scripture and to experience.

HISTORICAL POSITION.—Maimonides marks the culmination and the end of medieval Jewish philosophy, into which he introduced Aristoteleanism for the first time in its pure form. Presupposing revelation as true, Maimonides set himself the task of harmonizing theology and philosophy by applying the fundamental ideas of Aristotle to Jewish theology, and of showing the credibility of the revelation of the Old Testament when viewed in the light of these ideas.

The *Guide for the Perplexed* was well known to the Schoolmen. Alexander of Hales, William of Auvergne, Albert the Great, and St. Thomas used it. Maimonides was the model of Albert and of St. Thomas, when they undertook to systematize theology and to show that revelation does not contradict reason. Maimonides made the Jewish scholars acquainted with Aristotle's philosophy, and so fitted them to make known in their turn the results of Arabian scholarship to the Christians by means of translations. The *Guide* of Maimonides was also translated into Latin through the Hebrew before the middle of the twelfth century. On the other hand,

the idea of welding Aristoteleanism with Judaism was not original with Maimonides. His predecessor in this was Abraham Ibn Daud (1110-1180), better known as John Avendeth, who touched upon most of the problems treated by his more famous successor.

Section II

THE CLASSICAL PERIOD: THE THIRTEENTH CENTURY

INTRODUCTION

168. From the second half of the twelfth century the Christian philosophers of Western Europe came into contact with Arabian and Jewish philosophy, and through it with Aristotle, who had for the most part remained unknown to them. From these sources they received the stimulating ideas which caused the revival of philosophy in the West and the culmination of Scholasticism in the thirteenth century.

Besides the formation of the Scholastic system, this period comprises several minor tendencies in Scholasticism, as well as Latin Averroism, a powerful current of thought hostile to the Schoolmen. The minor tendencies of this period comprise the Neo-Platonism of Witelo and Thierry of Fribourg, the experimental leanings of Roger Bacon, and the *Ars Magna* of Raymond Lully. All of these philosophies had their part in the development of the intellectual life of the thirteenth century by fostering various aspects of Scholasticism and by combating Averroism, the most dangerous intellectual foe of Christianity during the Middle Ages.

CHAPTER I

THE REVIVAL OF PHILOSOPHY

169. Causes.—The revival of philosophy in the thirteenth century was due to three causes: the influx of new philosophical ideas from the Arabs, the Jews, and the Greeks; the founding of the universities, which brought about the centralization of philosophical studies and the spread of philosophical culture; and the rise of the Mendicant Orders, which vied with the universities by the establishment of important houses of studies, while seeking professorships for their members in the universities.

§ 1. THE INFLUX OF NEW IDEAS

170. The Translation of Sources.—Two groups of philosophical sources were now made accessible to Western scholars by means of Latin translations. The works of the great philosophers of Greece once more became known to the Western mind, and the philosophical writings of the Arabs and the Jews for the first time came within its ken. Since the philosophers of the West were not conversant with the languages in which these works were written, the Latin language was the medium through which they obtained contact with them. Translators performed the important work of bridging the chasm between the East and the West.

The first translations of Greek sources, which appeared about the middle of the twelfth century, were made through Arabic or through Hebrew, and often through both of these languages. The original text of Aristotle was obtained principally from Constantinople in the beginning of the thirteenth century, and direct translations were then made. As compared with translations made from the Arabic, direct translations from the Greek were more accurate, fewer in number, and less widely known.

The Western philosophers naturally preferred translations made directly from the Greek, since the indirect translations suffered not a little by passing through the medium of Oriental languages, and were often consciously or unconsciously interpreted rather than translated by the Oriental mind.

The earliest translations were made from the Arabic. The principal school of translators was established in Toledo by Archbishop Raymond, and counted among its members Dominic Gundissalvi, John Avendeath, Gerard of Cremona, and others. Gundissalvi, John Avendeath, and a Jew named Solomon, together translated Avicenna's *Metaphysics*, parts of his *Physics*, *De Cælo et Mundo*, and *De Anima*. They also translated parts of Algazel's *Metaphysics* and of Alfarabi's *De Scientiis*. Gundissalvi and John Avendeath translated Avicbron's *Fons Vitæ* from Arabic into Latin. John Avendeath translated Avicenna's *Logic* and Costa Ben Luca's *De Differentia Spiritus et Animæ*.

Gerard of Cremona translated Aristotle's *Analytica Posteriora* with the *Commentary* of Themistius, also Aristotle's *Physics*, *De Cælo*, *De Generatione et Corruptione*, and the first three books

of the *Meteorica*; furthermore, Alkindi's *De Somno et Visione*, *De Intellectu*, and *De Quinque Essentiis*; Isaac Israeli's *Book of Definitions* and *Book of Elements*; and the celebrated *Liber de Causis*, which made Christian philosophers acquainted with Neo-Platonism in the form into which Proclus had cast it.

Robert Greathead translated Aristotle's *Ethics* between 1240 and 1250. Bartholomew of Messina translated the *Magna Moralia*. William of Moerbeke (d. 1286) was the philological adviser of St. Thomas, at whose suggestion he revised a number of older translations of Aristotle. William also translated for the first time Aristotle's *Politics* (about 1260) and *Economics* (1267); the commentary of Simplicius on Aristotle's *Categories* and on *De Cælo*; the *Elementatio Theologica* (1268), *De Decem Dubitationibus circa Providentia*, *De Providentia et Fato*, and *De Malorum Subsistentia* (1281) of Proclus. Hermannus Allemannus (d. 1272) translated a number of the writings of Averroës.

According to William Brito, Aristotle's *Metaphysics* had been brought in the original from Constantinople, and was in use in Paris in a Latin translation in the year 1210.

Translations were not made only for Christians: members of the Jewish family Ben-Tibbon, of Lunel in France, brought the Aristotelean current of philosophy to Maimonides through their translations of Averroës into Hebrew.

Among the translations of *apocrypha*, that of the *Liber de Causis* made by Gerard of Cremona (d. 1187) is noteworthy, because of the prestige which this work enjoyed on account of its reputed Aristotelean authorship. The *Liber de Causis*, as it is

usually called since Alexander of Hales, is a compendium of the *Elementatio Theologica* of Proclus, written in the ninth century by a Mohammedan. St. Thomas was the first to recognize its Neo-Platonic character.¹

The somewhat lengthy list of translations given above, which can easily be extended by translations of scientific and medical, as well as philosophical works, serves to show the vast amount of philosophical material which reached the Christian philosophers of the West in little more than a century.

171. Influence on Scholasticism.—These translations made known to the Schoolmen two distinct groups of philosophical sources, the writings of Aristotle and those of the Arabs and of the Jews. Through the works of Aristotle they came into possession of an entire system, embracing the whole wide field of philosophy, from the pages of which new problems and new solutions of old problems crowded upon them at every turn. The writings of the Arabs and the Jews made the Schoolmen acquainted with Neo-Platonism and the Neo-Platonic interpretation of Aristotle. While they learned the method of interpretation from this source, the errors of the Arabs directed them toward an intensive and painstaking study of text and commentary and toward an independent consideration of both. Taking the divine truth of revelation for their guide, the Schoolmen were obliged to reject entire systems of philosophy, such as that of Averroës. On the other hand, the agreement which Maimonides established between Aristotle and the Old Testament led them, when necessary, to correct Aristotle in the

¹ See St. Thomas's introduction to his *Commentary* on this book.

light of Christianity, and to develop and complete what he had left unfinished.

172. Aristotle Temporarily Forbidden.—In the false interpretation of the Arabian philosophers, in which Aristotle first became known to the West, lay an open challenge to Christianity which was bound to lead to open conflict. As the Arabian interpretation was not immediately distinguished from the source it professed to explain, because both text and commentary came from a language unknown in the West, the battle was directed primarily against Aristotle. The opposition was aggravated by the fact that the Arabian translations, which were the only ones known at first, interpreted their own Neo-Platonism and other errors into the very text of Aristotle, the true form of which became known only later when direct translations from the Greek were made. The state of affairs was even more complicated and the issue beclouded by various pseudo-Aristotelean works, such as the *Liber de Causis* and *De Secretiori Egyptiorum Philosophia*, which were circulated over the name of Aristotle. The errors which became current in this way, more than once proved the undoing of Christian teachers of philosophy by estranging them from the Faith.

The following strictures are to be understood in the light of the situation outlined above. In 1210 the Provincial Council of Paris forbade the public and private teaching of Aristotle under pain of excommunication. The *Metaphysics*, which had just been translated directly from the Greek at this time, was burned. In 1215 Robert de Courçon, the papal legate, sanctioned these decrees, which were issued only for Paris. Aristotle continued to be taught

elsewhere (for example, in Toulouse). In 1231 Pope Gregory IX forbade the study of Aristotle's *Physics* until the text had been examined and the errors expunged, so that these treatises might be studied with no danger for the Faith. In 1245 Pope Innocent IV extended the decrees of Paris to Toulouse.

These prohibitions gradually fell into desuetude. In 1231 Aristotle was taught in Paris. In 1255 all of his works were officially listed in the programs of the university. Roger Bacon says that the decrees were not observed after 1237. In 1261 St. Thomas and William of Moerbeke were at the court of Pope Urban IV; thus, the Pope must have been informed concerning the projected new translation of Aristotle, and probably he encouraged it. In 1366 the papal legates required a knowledge of all of Aristotle's writings for university degrees. The influence of Aristotle grew apace under the bold pioneer work of Albert the Great and St. Thomas, his greater pupil.

§ 2. THE FOUNDING OF THE UNIVERSITIES

173. The Great Medieval Universities.—The University of Paris was the intellectual center of the Middle Ages, but other universities of great importance were those of Oxford, Cambridge, and Bologna. The causes which led to the founding of the universities were: (1) the introduction of new subjects of study into philosophy, the natural sciences, and medicine; (2) the adoption of new methods of teaching, such as the application of the dialectical method to theology; (3) the growing tendency to organization which accompanied the formation of European nationalities.

The UNIVERSITY OF PARIS gradually grew out of the association of masters and scholars on the Île de la Cité. The schools on the island were attached to the cathedral school and presided over by the Chancellor of Notre Dame. Some time between 1150 and 1170 these schools and masters formed a corporation, which was the earliest form of the university. The university statutes were not compiled until about 1208. The earliest recognition of the university as a legal corporation is in a Brief of Innocent III of the year 1211, empowering it to elect a proctor to represent it at the papal court. When fully developed, the university was organized into the four faculties of theology, medicine, canon law, and arts. The faculties were formed through the identity of the interests of the professors. The faculty of arts was divided into four "nations," which were corporate associations of the masters and scholars grouped according to the districts from which they came. The head of each faculty was the dean; the head of each nation was the proctor. The proctors of the "nations" elected the rector. About the middle of the fourteenth century the rector thus elected became the head of the collective university.

In mediæval times the courses in philosophy were a preparation for those in theology; hence the philosophical cast of mind developed at the university. The digressions of the professors of theology into the domain of philosophy were due to the application of the dialectical method to theology, and occasionally to the insufficient preparation of students. Every competent graduate was granted permission to teach; every student was obliged to have definite teachers. In philosophy and in theology the uni-

versity conferred the baccalaureate, licentiate, and doctorate. Lectures and disputations were the forms of teaching.

The organization of the UNIVERSITY OF OXFORD, which was second only to that of Paris, was modelled on the latter. The schools of Oxford were organized into a *studium generale* (the medieval name for a university) about 1167 or 1168. The immediate cause of its formation was the quarrel of Henry II with Archbishop a Becket, with whom the King of France openly sympathized. Henry recalled all scholars from Paris, where many English students received their higher education. John of Salisbury says that the English students were driven from Paris. Oxford at first had a rather fluctuating body of students, a situation which was remedied by the founding of colleges. University College, the first founded, dates from 1249. Among the famous professors in Oxford in medieval times were Robert Greathead, Roger Bacon, Duns Scotus, William Occam, and Thomas Bradwardine.²

²The growth of the UNIVERSITY OF CAMBRIDGE dates from the advent of students from Oxford in 1229. BOLOGNA had famous schools from Roman times. Its university was the most famous school of jurisprudence in the Middle Ages ("Bononia docet"). With these dates it is interesting to compare the rise of universities elsewhere. The first university in Spain was founded at VALENCIA in 1212. PRAGUE had the first German university (founded in 1348). The first American universities were those of SAN MARCO in Lima, Peru, erected in 1557, and MEXICO CITY, founded in 1551. Cf. *Catholic Encyclopedia*, XV, 201. Concerning the University of Oxford, see MALLETT, *History of the University of Oxford*, 2 Vols. (London, 1924). This is a work of great learning and equally great antipathy toward things Catholic.

§ 3. THE MENDICANT ORDERS

174. Influence on Philosophy.—The Mendicant Orders sought entry to the faculty of the University of Paris at an early date. In 1229 and 1231 the Dominicans obtained professorships for Roland of Cremona and John of St. Giles, who were members of the Order. The Franciscans obtained their first professorship when Alexander of Hales, a secular professor in the university, joined their Order in 1231.

About the middle of the thirteenth century a sharp controversy arose between the seculars and the Mendicants concerning the occupancy of professorships at the university, and with it was joined a general struggle for prestige. The causes of this conflict were: the admission of the regulars to professorships; the disparagement of the religious state by the seculars; the papal privileges of preaching and administering the sacraments everywhere, which were granted to the regulars; and the excess of scholastic zeal on the part of John de Montesono, which led to the temporary exclusion of the Dominicans from the faculty of theology.

The scholars of the Mendicant Orders exercised a very great influence on the development of Scholastic philosophy. Albert the Great, St. Thomas, and Duns Scotus, the most illustrious philosophers of the thirteenth century, were members of these Orders.

The earliest Dominican scholars adhered to the philosophical doctrines of the older Schoolmen, but Albert and Thomas became the pioneers and the outstanding exponents of Christian Aristoteleanism.

Two schools developed in the Franciscan Order: Alexander of Hales and St. Bonaventure were the leaders of the Early Franciscan School, which was a compromise between the Aristotelean and the so-called Augustinian teachings; Duns Scotus was the founder of the more important New Franciscan School, which is an original shading of the Peripatetic doctrine.

The Scholastic prestige and authority of the Mendicants was checked by the establishment of secular colleges, the most important of which was the Sorbonne, founded by Robert de Sorbon in 1253. This college formed part of the university, and instruction in theology was given without charge by the masters. In the course of time the Sorbonne became a large institution, and enjoyed an equally great prestige. Its Scholastic influence was at its height when it was the place of assembly for the professors of the theological faculty of the university, most of whom were among its members.

CHAPTER II

SCHOLASTICISM

§ 1. INTRODUCTION

175. Characteristics.—The Scholastic philosophy of the thirteenth century may be characterized in a general way as the formation of the Scholastic system, whose expounders exhibited a remarkable individual diversity, though they always worked from a metaphysical point of view. The relation between philosophy and theology was definitely stated in scientific form by St. Thomas.

176. Predecessors of St. Thomas.—Before the time of St. Thomas Scholasticism lacked unity, because its exponents often misunderstood Aristotle, and failed to recognize the systematic connection between the different parts of the Peripatetic doctrine. They clung to received doctrines because of the authority they possessed in the schools, and, on the other hand, they were inclined to accept Arabian teachings because of their reputed Aristotelean origin.

Among the characteristic doctrines of pre-Thomist Scholasticism, which was wrongly termed Augustinianism because these doctrines were believed to be those of St. Augustine, are: (1) the pre-eminence of the idea of the good over that of the true; (2) the primacy of the will; (3) the necessity of an immediate enlightenment by God for positing certain acts

of the intellect; (4) prime matter, independent of its information by a substantial principle, as the lowest kind of actual being; (5) the *rationes seminales*; (6) the hylomorphic composition of created spirits; (7) the plurality of substantial forms, especially in man; (8) the individuation of the human soul independently of its union with the body; (9) the identity of the soul with its faculties, and the manner of the formation of the idea; (10) the impossibility of an eternal creation.¹

This group of doctrines cannot be termed Augustinian in opposition to Aristotelean philosophy, for the relations of Peripatetic and so-called Augustinian Scholasticism should be determined rather by the fundamentals in which they agree, than by particulars in which they differ. These doctrines were developed on an Aristotelean basis, and so good a Peripatetic as Duns Scotus gave to several of them a place in his system. A number of them are not found in St. Augustine.

177. The Struggle of Pre-Thomism against St. Thomas.—As the true Aristotle became known and the decrees of Paris and Rome fell into desuetude, a new school of Christian philosophy, frankly Aristotelean in character, arose under Albert the Great and was brought to perfection by St. Thomas. The appearance of this new philosophy in the intellectual stronghold of the older Scholasticism was itself a challenge to battle. A bitter struggle ensued between the two, the outcome of which was the division of the Schoolmen into three groups. Each of these groups accepted the fundamentals of Scholasticism, and hence there is only one Scholastic philosophy.

¹ DE WULF, p. 318. MANDONNET, *Siger de Brabant*, I, 56 sq.

But they also differed in important philosophical doctrines. One group remained intransigent adherents of the older Scholasticism; a second group became equally immovable expounders of the new; and a third group became eclectics, endeavoring to fuse into a unit doctrines chosen from the old and the new schools. The struggle against St. Thomas was carried on, not only by the Pre-Thomists, but also by Duns Scotus and the school he founded.

178. Religious Character.—The medieval civilization of Western Europe was dominated by religion. Convinced that truth is one and contains no contradictions, the Schoolmen subordinated philosophy to the doctrines of faith and to theological science in the same sense as the Fathers of the Church had done before them (SECTION 104). Next below revelation they ranked philosophy, because its object is the most universal, its problems the deepest, and its content the most valuable of all profane knowledge. They held the sciences in high esteem, even in the rudimentary form in which they possessed them, but ranked them below philosophy, because philosophy builds up its structure partly on their achievements, and because their object is limited in extent. Thus, religion was the bond which in the Middle Ages unified knowledge and determined its organization.

The relation of philosophy to theology is determined by the formal object of each. Theology studies the supernatural order in so far as it is known to us through revelation; philosophy studies the natural order in so far as human reason can know it. Revelation also contains certain truths of the natural order, such as the existence and the attributes of God; but the human intellect by its own

power can never peer into the realm of the supernatural, because of the finite character of the mind. The motive of the assent of the intellect to divine revelation is the authority of God: since He is all-knowing, He cannot be deceived, and, since He is all-holy, He cannot deceive us. In philosophy the motive of assent is either evidence, or demonstration by the principles of reason. Since the human mind is fallible, its interpretation of the data of science, whether as evidence or as demonstration, is liable to error. Hence, when philosophy (which is liable to error) contradicts revelation (which is infallible), the error is on the side of philosophy. But, when philosophy propounds doctrines in the natural order which do not oppose revelation, its judgment is supreme; but it remains subject to revision in accord with the established results of further scientific investigation.

Scholastic philosophy is a distinct science, because it is a unified interpretation of the natural order based on physical and psychological facts, and made in accord with the same canons of evidence and demonstration upon which all science is based. The Schoolmen ranked the sciences below philosophy, because philosophy uses for its raw material the highest achievements in which science culminates. It begins where science leaves off.

179. Characteristic Doctrines.—Scholasticism is a unique elaboration of the material which was given in the philosophies of Aristotle, Neo-Platonism, and the Arabs. With this the Schoolmen worked up the great store of ideas bequeathed to them by St. Augustine. These varied materials were fused into homogeneous unity by means of Aristotle's funda-

mental metaphysical concepts. But, withal, their science remained grounded upon reality, for their metaphysics is the study of the substance of the objects of our experience. Metaphysics is also the foundation of Scholastic dualism, the real distinction between God and creature. The world which God created is governed by final causes (another Aristotelean conception). Man is equipped to know this world. Our knowledge is objective in the sense that it is a true analysis of experience, but concepts are spiritual, because they are formed by abstraction. The human will is free, and happiness is the last end of man. Coherence, completeness, and the finding of the true middle position between various extremes are prominent characteristics of Scholastic philosophy. The Schoolmen unified and completed the philosophical achievements of the past, and exercised a profound influence upon the succeeding centuries.

§ 2. PRE-THOMIST SCHOLASTICISM

180. Seculars.—Little is known of the life of DOMINIC GUNDISSALVI (GUNDISSALINUS) except that he was Archdeacon of Segovia in the time of Archbishop Raymond (1126–1151), and a member of the school of translators established by him (see above, n. 170). Gundissalvi was the first of the Schoolmen to make Western scholars acquainted with the philosophy of the Arabs, and to a limited extent with that of Aristotle. He wrote the philosophical treatises *De Unitate*, *De Anima*, *De Processione Mundi*, and *De Divisione Philosophiæ*. His treatise on the soul is notable for having propounded the arguments from the justice of God, from the desire for happi-

ness, and from the simplicity of the soul to prove its immortality. The last of these arguments, as he proposes it, has a distinctly Aristotelean color. His book, *De Divisione Philosophiæ*, gave the impulse which led to the abolition of the old Scholastic course of the *trivium* and the *quadrivium*, by bringing within the horizon of the Schoolmen for the first time the sciences of metaphysics, physics, politics, economics, and ethics in their Aristotelean form. He made use of the physiological and empiric psychological knowledge of his time, was a skilled dialectician, and presented his matter in a clear and objective manner. William of Auvergne re-edited Gundissalvi's treatise *De Divisione Philosophiæ*, and published it under his own name, causing the name of its true author to be forgotten. It was Gundissalvi, not William of Auvergne nor Alexander of Hales, who brought Arabian Aristoteleanism in its complete form to the knowledge of the West.

WILLIAM OF AUVERGNE (d. 1249) was professor at the University of Paris, and bishop of that city from 1228. His philosophical writings are *De Trinitate*, *De Universo*, and an edition with alterations of Gundissalvi's *De Anima*. His epistemology has Platonic and Augustinian doctrines throughout. He rejects the doctrine of the one active intellect. William is the first of the Schoolmen to teach that all creatures, both material and spiritual, are composed of matter and form. From the Arabian philosophers he took over the doctrine of the real distinction between essence and ontological existence. He treats Aristotle as an opponent, and considers his philosophy as identical with that of the Arabs. He rejects Aristotle's doctrines of the active intellect,

of the *potentiæ* of the soul, of the eternity of the world, and of the star-spirits. He considers supernatural truth accessible to human reason, and endeavors to prove it by arguments *ex convenientia*. He has the free method of exposition, and in attacking his opponents concentrates on the foundations rather than on the details of their doctrine. William was one of the official "correctors" of Aristotle.

§ 3. THE EARLY FRANCISCAN SCHOOL

181. Alexander of Hales (b. 1170/1180; d. 1245).—**LIFE.**—Alexander was born in Gloucestershire, England. He studied in Paris, and became famous as a teacher of theology in the university. In 1231 he became a Franciscan, retaining his chair of theology; thus, the Franciscans obtained their first professorship in the university.

PHILOSOPHY.—His great work is the *Summa Theologica*,² which remained unfinished. Alexander is the first of the Schoolmen to make use of the whole of Aristotle's writings. Yet, his philosophy remains a combination, sometimes inconsistent with itself, of Aristotelean and so-called Augustinian elements. This inconsistency is sometimes due to his taking over theses and proofs from philosophers of opposite tendencies; sometimes to accepting doctrines of the Pre-Thomists; and occasionally perhaps to a lack of settled convictions, where he registers only the opinions of others. Alexander, of course, also made use of the Arabian commentators on Aristotle,

² This is the title as given in the Quaracchi Edition (1925). See the *Prolegomena* in the beginning of the volume. Older titles are: *Summa Theologiæ* and *Summa Universæ Theologiæ*,

especially of Avicenna. Among the characteristic doctrines of Alexander may be mentioned, in metaphysics, the doctrine that every contingent being is composed of matter and form; that a spirit is incapable of substantial change; and the doctrine of the plurality of forms. In psychology he teaches that the human soul is composed of (spiritual) matter and form; that the body has the *forma corporeitatis*; and that soul and body are united "*ad modum formæ cum materia*." Somewhat timidly he asserts the real distinction between the substance and the faculties of the soul. *Ratio*, *intellectus*, and *intelligentia* are the faculties of intellectual cognition.

182. Robert Greathead (Grosseteste, 1175–1253).

—LIFE.—Robert was a native of Stradbroke in Suffolk, and studied in Oxford (probably from 1195 to 1199) and later perhaps in Paris. He won his degree in Oxford, became professor and chancellor of the university, and was appointed Bishop of Lincoln in 1235. He maintained his connections with the University of Paris, and endeavored to organize the University of Oxford according to its model. He had a good knowledge of Greek, and translated many Greek writings into Latin. His own writings comprise commentaries as well as original works, largely of a mathematical and scientific character.³

PHILOSOPHY.—Robert's "metaphysics of light" is the key, not only to his scientific theories, but also to his philosophy.⁴ *Lux*, which is light in a metaphysical sense, is the form, or corporeality of

³ See BAUR'S complete edition in BÄUMKER'S *Beiträge*, Vol. IX (Münster, 1912).

⁴ For a history of this theory, which is not peculiar to Robert of Lincoln, see BÄUMKER'S *Witelo*, pp. 357–437 (Münster, 1909). Cf. *infra*, n. 207.

bodies.⁵ It is a subtile, simple, corporeal substance, the most valuable and important kind of matter. It was created by God in the beginning as the form of primal matter, and spread through space in all directions. From its own periphery it returns to the center of the universe as *Lumen*, the light of our experience. Corporeal objects are formed by the condensation of light. Robert applies this theory to explain nature and its laws, the formation of the world, the physiology of sensation, and intellectual cognition. Robert's theory of cognition is the Augustinian illumination. His metaphysics is fragmentary, owing probably to the fact that most of his study was given to science. He has the Aristotelean concepts of act and potency, matter and form, cause, space, and time, but he did not realize their full meaning and importance. Important parts of his metaphysics are Augustinian and Platonic, such as the relation of the soul to the body, the freedom of the will, and the concept of truth.

HISTORICAL POSITION.—The importance of Robert Greathead for philosophy lies in his devotion to scientific studies, through which he exerted a mighty influence, not only on Roger Bacon (his greatest pupil), but also upon the whole current of English Scholastic thought.

183. St. Bonaventure (1221–1274). — **LIFE.** — A native of Bagnorea in Tuscany, Bonaventure entered the Franciscan Order at the age of seventeen years. His family name was Giovanni Fidanza, but he is commonly known by the name given to him by St. Francis of Assisi. He studied in Paris, where he

⁵ “*Formam primam corporalem, quam quidam corporcitatem vocant, lucem esse arbitror*” (*De Luce*, BAUR'S edition, p. 51).

heard Alexander of Hales lecture from 1243 to 1245. In 1248 he became professor at the university; but, owing to the conflict of the seculars with the Mendicants, he obtained his doctor's degree only in the fall of 1257, together with St. Thomas Aquinas, his intimate friend. In the spring of 1257 he was appointed Minister-General of his Order. In 1273 he was created Cardinal and Bishop of Albano. He died at Lyons during the Council.

PHILOSOPHY.—The metaphysics of St. Bonaventure contains three characteristic doctrines: the metaphysics of light, the plurality of forms, and the *rationes seminales*. He derives the metaphysics of light from Holy Scripture, from Pseudo-Dionysius, and from St. Augustine. Light is a substantial form, which all bodies possess in addition to their specific forms. The form of light is the principal form of bodies, because it sustains every other form, enables it to act, and determines its rank and perfection in the hierarchy of corporeal beings according to the degree in which it participates in the form of metaphysical light. The *rationes seminales* (a doctrine derived through St. Augustine from Neo-Platonism and Stoicism) are active powers present in matter as the initial dispositions from which substantial forms are educed by the action of external natural causes. In psychology St. Bonaventure held that all created substances, both spiritual and corporeal, are composed of matter and form (the "matter," of course, being spiritual in the case of spiritual beings). The human soul, which originates through creation, is a spiritual substance and the substantial form of the body (Aristotle's concept interpreted in an Augustinian sense). Being a sub-

stance, the soul is imperishable. In the process of intellectual cognition, the active intellect first abstracts the *species* (image) from the fantasm; then the passive intellect turns to the *species*, and receives it into itself with the aid of the active intellect, and judges of it. The active intellect, which is something of the soul (*aliquid animæ*), is a light by means of which we attain a knowledge of the first principles of science and of ethics through experience and abstraction. These principles are innate in the mind only in the sense that this light, which is something of the soul, guides the intellect and impels it to form these principles from the concepts abstracted from sense-experience. The “*ratio æterna*” required for the knowledge of these principles and also of God is a special influence of God upon the active intellect (which is passive under this influence) whereby the intellect is impelled and directed to form these principles, without however knowing the “*ratio æterna*” itself.

The principal writings of St. Bonaventure, whom posterity calls the *Doctor Seraphicus*, are his *Commentary on the Sentences* of Peter Lombard, the *Breviloquium*, and the *Itinerarium Mentis ad Deum*.

HISTORICAL POSITION.—Although St. Bonaventure disclaims originality and intends to propound the views commonly held in his time, he made no opposition to the Aristotelean School, which reached its height in his friend, St. Thomas. On account of his conservatism, his writings are a valuable source of the received doctrines of the older Scholasticism in his time. He knew and used Aristotle, whose authority he considered second only to that of St. Augustine. St. Bonaventure is critical of Peter

Lombard, being the first to formulate a list of eight propositions which later Schoolmen agreed in rejecting with him. Among the pupils of St. Bonaventure who achieved distinction are Matthew of Aquasparta, John Peckham, and William de la Mare.

184. Richard Middleton (d. 1307/1308)⁶ studied and taught at both Oxford and Paris. Richard marks the transition from St. Bonaventure to Duns Scotus. He abandons the doctrine of the Franciscan School that we know objects in the eternal truth, and substitutes for it the inference from the properties of objects to their nature. He rejects eternal creation as intrinsically impossible. In psychology he holds that the soul is the substantial form of the body, but he also sustains the doctrine of the form of corporeality, which is educed from the potency of matter. Richard introduced the empiric tendencies of the English scholars into the University of Paris.

§ 4. PRE-THOMIST DOMINICANS

185. Roland of Cremona (d. 1250) was the first of the Dominicans to occupy a chair of theology in the University of Paris (1229–1231). Like Robert Fitzacre and Robert Kilwardby, he knew and utilized the writings of Aristotle, but departed from them whenever the new philosophy ran counter to the old Scholasticism. His *Conclusiones Super Quattuor Libros Sententiarum* is extant in manuscript. **Peter of Tarentaise (d. 1276),**

⁶ His true name is now said to be Richard de Meneville, and it is not certain that Middleton was his birthplace. The de Menevilles belonged to the nobility of Northumberland. See PELSTER in *Philosophisches Jahrbuch*, XXXIX (1926), pp. 172-78.

who was elected Pope in the year of his death and took the name of Innocent V, taught theology in Paris from 1256 until 1265. He was an exponent of the older form of Scholasticism, but was not hostile to the School of St. Thomas, in defence of whom he is said to have written a treatise *De Unitate Formarum*. He was associated with St. Thomas also in planning the new course of studies adopted by the Dominicans at Valenciennes in 1259. **Robert Kilwardby** (d. 1275) studied in Paris, and taught theology in Oxford from 1248 until 1261. In 1272 he was appointed Archbishop of Canterbury, and in 1278 he was created Cardinal. He was a staunch advocate of the older Scholasticism and a bitter opponent of the Aristotelean school. His treatise *De Ortu et Divisione Philosophiæ* is reputed the best medieval introduction to philosophy.

§ 5. THE SCHOOL OF ALBERT AND ST. THOMAS

186. General Characteristics.—Albert the Great founded a new school of philosophy, which reached its culmination under his pupil, St. Thomas Aquinas. This school marks a new departure in Christian philosophy, for, as the earlier Schoolmen had taken the philosophical ideas of St. Augustine as the source of their inspiration, so Albert and Thomas made Aristotle the basis of their philosophy. All who have studied it, both friend and foe, acknowledge it as one of the great systems of thought. By custom as well as by precept it has become the official Catholic philosophy.

I. ALBERT THE GREAT

187. Life.—Count Albert of Bollstädt was born in Lauingen on the Danube in 1193. He studied in Padua, and became a member of the Dominican Order. Having taught in various houses of the Order from 1228, he was appointed professor in Paris in 1245, and had St. Thomas among his pupils. Three years later he was transferred to the new house of studies in Cologne, where St. Thomas continued under his instruction until 1252. In 1256 Albert appeared at the court of Alexander IV in Agnani to defend the Mendicants against the attacks of William of St. Amour. In 1260 Albert was appointed Bishop of Ratisbon, but resigned the office within two years. Then he preached the crusade in Germany as the Pope's legate. Previous to this, he had been associated with St. Thomas and Peter of Tarentaise in formulating the new program of studies for the Dominicans. In 1277 the weight of his years did not deter him from making the journey to Paris to defend the memory of St. Thomas against the censures of the bishop. His long and fruitful life came to a close in Cologne on November 15, 1280. In 1622 he was beatified by Pope Gregory XV. Albert was versed in practically all the sciences known in his time. His wide learning earned him the title of *Doctor Universalis*. He wrote on all branches of theology and philosophy.⁷

188. Philosophy.—The pre-eminent merit of Albert with regard to Christian philosophy lies in the

⁷ For a list of his works see ÜBERWEG, *Grundriss*, II, ed. BAUMGARTNER (10th ed.), pp. 464 sq., where over 40 philosophical treatises are catalogued; or *The Catholic Encyclopedia*, I, 264 sq.

fact that he recognized the capital value of the true Aristotle for philosophy and theology; that he realized the crying need of incorporating him into the science of the West in the face of its limitations, its confusion, and the rise of Averroism; and that he devoted himself with unfaltering endeavor throughout his long life to the accomplishment of this gigantic task. But Albert was not only a scholar; he was an eminent teacher, as the important assignments which were given to him abundantly show. A teacher lives on in his pupils. If it were not for the towering figure of St. Thomas, to the training of whose youthful genius he devoted seven years, Albert's dominating influence on German Scholasticism, as it appears in lesser lights like Hugo Ripelin and Ulric of Strassburg, would not be so completely overshadowed.

When Albert began to write, Aristotle's thought was still too new and strange to the Western mind for technical commentaries like those of St. Thomas. So he set out "to make Aristotle intelligible to the Latin-speaking scholars," as he says, by the simpler device of paraphrase. The result of his work is characterized by Ulric of Strassburg, who praises Albert as "the astonishment and miracle of our time." Even the sarcastic pen of Roger Bacon was moved to write that Albert is "the pre-eminent teacher of philosophy." Albert's great achievement was to set over against Averroism, which seemed about ready to celebrate its triumph over Christianity, a complete and coherent philosophy which was an incontestable vindication of Christian thought and revelation against Neo-Platonic pantheism.

Albert maintains an independent attitude toward

Aristotle. He is careful to disengage his thought from that of his commentators, but does not attribute absolute authority to him. Whenever Aristotle runs counter to Catholic doctrine, his views are abandoned. Albert does this not only on the score of the higher authority of the Church, but he seeks to show by arguments from reason that Aristotle erred. In this connection he proves against Aristotle the impossibility of eternal creation. Even where he expounds the views of Aristotle in their entirety, he is careful not to identify himself with them outright, as it is apparent from the conclusion of his treatise on the *Metaphysics*.

In many cases Albert did not succeed in fusing into a homogeneous unity the heterogeneous thought which crowded upon him from Aristotle, the Arabs, and Neo-Platonic philosophy. From the latter sources he selected what he believed to be in agreement with the Peripatetic system, but this choice was not always happy. Nor did he succeed in freeing himself altogether from the trammels of the pre-Thomist tradition. Thus, his psychology is a combination of Aristotelean, Neo-Platonic, and Augustinian elements.

189. Science.—Albert and Roger Bacon were the greatest scientists of the thirteenth century. Of course, this does not mean that Albert knew and used the modern methods of research. He insisted on the principle that observation and experiment alone can give us a knowledge of nature. He frequently completes Aristotle's description of animals, and has given to science the earliest description of the animals of his native country. But he often accepts Aristotle's authority where the simplest ob-

servation would have convinced him otherwise. The fact that he failed to identify many common animals of the ancient world, is due to the faulty translations which he used. The Greek text often came to him through the medium of Arabic and Hebrew translations, and thus was badly garbled. If the scientists who came after Albert had followed his principle and practice of observation, the progress of natural science would have been spared a detour of three centuries.

Albert teaches a number of doctrines which are considered original with St. Thomas, such as the theory of the active and the passive intellect as it is proposed by St. Thomas. Albert also anticipated St. Thomas in his method of exposition by means of objection and solution.

II. ST. THOMAS AQUINAS

190. Life and Writings.—Thomas was born at Roccasecca,^s probably in the year 1225. He was one of eight children born to Landolf, Count of Aquino, and Theodora, who was the Countess of Teate in her own right. Thomas's father was of Lombard, his mother of Norman descent. The connections which the family of Aquino possessed through marriage with several reigning houses and with the Emperor Frederick, gave prestige to Thomas and paved the way for him both toward a secular and an ecclesiastical career. In 1230 his parents sent him to the monastery school at Monte Cassino, in which the sons of the nobility were educated. His father un-

^s Roccasecca is a few miles from Aquino, the ancestral home of the Counts of Aquino. Aquino lies about 75 miles south of Rome, just off the railway to Naples, and is about 10 miles north-west of Monte Cassino.

doubtedly appreciated the value of an education for his children, as he himself held the position of judge in the courts. The choice of Monte Cassino as the school for the elementary education of Thomas was probably determined by its nearness to Aquino as well as by its reputation. Landolf, the father of Thomas, seems always to have maintained friendly relations with the monastery, for the chronicle of the monastery speaks of the "affectionate memory" in which he was held there, and he left twenty ounces of gold to the monastery for Masses for his soul. The earliest biography of Thomas also records the deep faith and fervent piety of his mother, two virtues which are equally conspicuous in her great son. It is idle to speculate what would have been the future career of Thomas if he could have remained longer in Monte Cassino. In 1236 the monastery was threatened by the war which ravaged the country. On the advice of the Abbot, Thomas was sent to the University of Naples to continue his studies. There he was taught the *trivium* by a Magister Martinus and the *quadrivium* by Peter of Hibernia. The faculty of theology at the university was in charge of the Dominicans. Many of the students attended the services at the Dominican church, and there Thomas probably came into contact with the friars for the first time. The Benedictines had been exiled from Monte Cassino in 1239 by the Emperor, and a few years later their monastery was reduced to ruin. Thus, Thomas had no opportunity of returning to this famous old home of Benedictine piety and learning. After the death of his father in 1243, Thomas received the Dominican habit, probably from the hand of Johannes Teutonicus, the General of the

Order. With four other novices he set out in the company of the General for Paris to enter the great university. But the opposition of his family followed him. Two of his brothers in the armies of the Emperor at Orvieto took him prisoner at Aquapendente, and carried him back to Castel San Giovanni, an estate of the family, situated a few miles from Aquino. Here he was detained for a year, during which time three of his sisters also resided on the same estate. As time confirmed rather than weakened his religious vocation, he was finally permitted to depart for Paris, again in the company of Johannes Teutonicus. He arrived in Paris in 1245, and became a pupil of Albert the Great, who had been appointed professor in the university in the fall of this year. When Albert was transferred to the new Dominican house of studies at Cologne in 1248, Thomas was also sent there and continued under Albert's instruction until 1252.⁹ The friendly relations between master and pupil continued throughout the life of Thomas. The tears of the aged Albert when informed of the untimely death of Thomas, and the long and wearisome journey to Paris which he undertook despite the burden of more than eighty years to vindicate the memory of Thomas, are a more eloquent tribute of his high esteem for the Angel of the Schools than any words he may have spoken.

191. The First Paris Period (1252-59).—The academic career of St. Thomas, which occupies the re-

⁹ Important recent studies on the family and the youth of St. Thomas are those by PELSTER in the *Civiltà Cattolica*, 1923, No. 1745, pp. 385-400; No. 1751, pp. 401-410; No. 1762, pp. 299-313; and by MANDONNET in the *Revue Thomiste*, 1924, pp. 243-68, 370-91, 529-47; 1925, pp. 3-24, 222-49, 393-416, 489-533.

maining twenty-two years of his life, is comparatively uneventful. Ecclesiastical preferment was offered him, yet he declined not only the Abbacy of Monte Cassino, but also the Archbishopric of Naples. His time was devoted entirely to his God and to the pursuit of science.

Upon receiving the baccalaureate in 1252 Thomas began his career as a teacher in the University of Paris with his lectures on the *Sentences* of Peter Lombard. Owing to the opposition of the seculars against the regulars, the champion of which was William of St. Amour, Thomas was commissioned licentiate by the rector of the university in 1256, but did not receive his doctorate from the faculty until the following year, when it was conferred on him and his intimate friend, St. Bonaventure. Thomas was now a fully accredited professor. His course also included lectures on Holy Scripture, which was the text-book for theological studies. His high conception of his duties as a teacher appears from the *Quodlibetum* I, 14, in which he declares that the teacher's office is more fruitful than that of the pastor of souls. His tireless industry is shown in a treatise written for the Duchess of Brabant, in which he says that he put off his answer to her request until his vacation. William of Tocco, one of his biographers, records the impression that Thomas made at the university: "He introduced new articles into his lectures, adopted a new method of scientific research and solution [of problems], and developed new arguments in his proofs. Every one who heard him teach new things in this way and solve doubts and difficulties with new reasons, did not doubt that God had enlightened him with the rays of a new

light." The full influence which Thomas exercised as a teacher will not be known until the works of his pupils have been published. In 1259 Thomas had the opportunity of utilizing his pedagogical experience at the General Chapter of the Dominicans in Valenciennes, where he formulated the new program of studies in conjunction with Albert the Great and Peter of Tarentaise (later Pope Innocent V), who was a fellow-teacher with Thomas in Paris for some years.

The following are the principal philosophical works, or works touching philosophical problems, which Thomas wrote during this period, as far as they can be approximately dated:

Between 1252 and 1256: *De Ente et Essentia*; *De Principiis Naturæ*; *De Natura Materiæ et Dimensionibus Interminatis*.

Between 1253 and 1255: *Commentarius in IV Libros Sententiarum*.

1256: *De Impugnantibus Dei Cultum*.

Between 1256 and 1259: *Quæstiones Disputatæ de Veritate*.

192. The First Italian Period (1259-67).—In 1259 or 1260 Thomas left Paris for his native Italy, which he had not visited for fifteen years. The General Chapter in Valenciennes had decided to erect schools for the training of Dominican missionaries for the missions among the Moors in Spain, and Thomas probably wrote the *Summa contra Gentiles* at the suggestion of Raymond of Pennafort for the use of these missionaries. From 1261 to 1264 Thomas was at the court of Urban IV in Viterbo and Orvieto. There he met William of Moerbeke, a Flemish friar, who became his philological adviser. At the suggestion of Thomas, William translated a

number of Aristotle's writings into Latin directly from the Greek. Thus, Thomas was better able to grasp Aristotle's true thought than Albert the Great, who had been obliged to rely on the indirect translations made by Michael Scotus and others. While he was at the Court of Pope Urban, Thomas was commissioned to write the Office for the Feast of Corpus Christi, including its beautiful hymns.¹⁰ The leisure which Thomas enjoyed in these years, made them a very productive period. The new Aristotle text resulted in a number of valuable commentaries. Association with the Pope and his court brought about the *Catena Aurea* and *Contra Errores Græcorum*. Clement IV (1265-68) offered Thomas the Archbishopric of Naples, which was declined. In 1265 Thomas was called to Rome to head the Dominican house of studies in the Roman province. From 1267 he was probably again at the Papal Court in Viterbo. The fame of Thomas at the Court of Pope Urban is described in the following verses of a court poet: "A man is there [at the Pope's court], who would become the discoverer of a new philosophy if the old were destroyed. As a new constructor, he would erect it in a better fashion. He would excel the old philosophers by the glory of his science."

The principal works of this period are, with approximate dates:

After 1260: *Compendium Theologiæ ad Reginaldum*.

Between 1261 and 1264: *Summa contra Gentilès*; *Catena Aurea*; *Commentary on the Book of Job*; *Office for the Feast of Corpus Christi*; *Commentary on the Ethics and the Physics of Aristotle* (?).

¹⁰ The Office is largely a revision of an older Cistercian Office,

Between 1261 and 1267: *Quæstiones Disputatæ de Potentia, De Malo, De Spiritualibus Creaturis, De Unione Verbi, De Natura Beatitudinis, De Anima.*

Between 1265 and 1267: the first part of the *Summa Theologica*; a second *Commentary on the First Book of the Sentences* (not extant).

After 1266: *Commentary on Aristotle's Metaphysics.*

193. The Second Paris Period (1268–71).—When the smoldering embers of the conflict between the secular and the regular professors at the university once more burst into flame, the Dominicans again sent Thomas, their most capable representative, to Paris. This period was a time of intellectual conflict in the career of Thomas.

The nature of the first battle is told by the titles of two treatises written during this period: *Contra Retrahentes ab Ingressu Religionis* and *De Perfectione Vitæ Spiritualis*. They are a defence of the religious state.

A deeper conflict was that with Siger de Brabant, a professor in the faculty of arts, and the leader of Latin Averroism. Siger was a renowned scholar and an acute thinker, but among other errors he taught the fundamental heresy of monopsychism, which threatened the whole Christian view of the world. He propounded this error principally in the treatise, *De Anima Intellectiva*. Against this Thomas wrote *De Unitate Intellectus contra Averroistas*. Its conclusion bears witness to the intensity of the conflict: "If any one boasts of his pretended science, and desires to object anything against our exposition, let him not do so in a corner and before boys, who have no judgment in the matter. Let him write against this treatise, if he has the courage to

do it. Then he will find not only me, who am the least of all, but many friends of truth to oppose him and to do battle against his ignorance." These are unusual words to all who know the placid and serene mind of Thomas. Averroism was condemned by the Bishop of Paris on December 10, 1270.

The last and greatest conflict was against the reaction which set in against the School of Albert and Thomas with the condemnation of Averroism. Since Arabian Aristoteleanism had led to such dire consequences, every shade of Aristotelean philosophy became suspected of heretical implications. The Franciscans led the vanguard of the older Scholasticism and the so-called Augustinianism under John Peckham, and they were joined by pre-Thomist Dominicans under the redoubtable Robert Kilwardby. For all these St. Augustine was not only the greatest Father of the Church, but also the greatest authority in philosophy. For Thomas and his School—he had enlightened adherents, though they were of smaller caliber—St. Augustine was truly the greatest Father of the Church, but Aristotle was the first authority in philosophy wherever his teaching did not conflict with the Faith. In the numerous cases in which Aristotle was at variance with the great Doctor of Hippo, Thomas endeavored to conciliate their divergent views, sometimes by a rather strained interpretation of St. Augustine, especially in psychology and epistemology. Thomas saw the tide of battle turn in his favor, but he did not live to see the complete victory which fell to Christian Aristoteleanism.

The struggles of this period were far from hampering the productive work of Thomas. These years mark the height of his literary activity. The prin-

cipal works of this period are, with approximate dates:

1269: *De Perfectione Vitæ Spiritualis*.

Between 1269 and 1272: *De Unitate Intellectus contra Averroistas*.

1270: *Contra Retrahentes ab Ingressu Religionis*.

Between 1268 and 1272: the Second Part of the *Summa Theologica*.

Between 1269 and 1272: *Quodlibeta I-VI*.

Between 1268 and 1271: *Quæstiones Disputatæ de Virtutibus in Communi*, *De Virtutibus Cardinalibus*, *De Caritate*, *De Correctione Fraterna*, *De Spe*. Commentaries on Aristotle's *De Cælo et Mundo*, *De Generatione et Corruptione*, *Perihermeneias*, *Meteorologica*, *Politics*. Commentary on *Liber de Causis*. *De Æternitate Mundi contra Murmurantes*. Commentaries on *Psalms i-liv*, *Isaias*, *Matthew*, *John*, *St. Paul's Epistles*.

194. The Second Italian Period (1272-74). — Thomas was recalled to Italy in 1272. The General Chapter of the Dominicans commissioned him to organize a house of theological studies. The petition of the university that Thomas be permitted to continue his work at the university, was unavailing. The choice of the location and of the organization of the new house of studies was left with Thomas. He determined upon Naples as the seat of the new institution. This city brought back to him the memories of his own studies, and it was there that he had entered the religious life in the Order of his choice. Charles of Anjou also urged Naples upon him.

In 1274 Pope Gregory X called Thomas to the Council of Lyons, in which the reunion of the Greeks with the Roman Church was to be effected. Thomas was called, not only because of his rank as the foremost theologian, but also because of his special competence in things concerning the Greek Church, as

was shown in his treatise *Contra Errores Græcorum*. But Thomas did not live to take part in the Council. Before he had travelled as far as Rome, he became ill and stopped at Maenza, which lies about three miles north-west of Roccasecca, his birthplace. He lodged with his niece, Francesca da Ceccano. When he became aware that his illness was fatal, he had himself carried to Fossanuova, three miles south of Roccasecca, to the Cistercian monastery. Here he died on March 7, 1274.

The rumor that Thomas was poisoned by Charles of Anjou, because he intended to lodge with the Council a complaint against the character and the government of Charles, is mentioned as early as the beginning of the fourteenth century.¹¹ There are no conclusive reasons definitely to confirm or to disprove this rumor. Perhaps the continued poor health of Thomas disproves it. The earliest historical sources concerning his life tell us that in the last years of his life he was exhausted and overworked, and that his physical condition no longer kept pace with the demands which his continued intense activity made upon it.

The writings of this period are *Quodlibeta VII-XI* and the Third Part of the *Summa Theologica*, Questions i-xc. The *Supplement* was compiled by Reginald of Piperno, Thomas's companion, from the *Commentary on the Sentences*.

The honorary Scholastic title *Doctor Communis* was given to Thomas at least as early as 1317. The title *Doctor Angelicus* is first used in an Italian print of the fifteenth century. St. Thomas was canonized

¹¹ DANTE, *Purgatorio*, XX, 68 (this part was written between 1314 and 1321).

by Pope John XXII on July 18, 1323. His body was transferred from the church in Fossanuova to Toulouse in 1368. In 1567 he was declared a Doctor of the Church, and in 1880 patron of Catholic schools.¹² In his Encyclical *Studiorum Ducem* of June 29, 1923, Pope Pius XI gave St. Thomas the new title of Universal Doctor of the Church.

195. Philosopher.—The philosophy of St. Thomas marks a distinct advance over that of Albert the Great. Since he possessed direct Latin translations of Aristotle, St. Thomas was better able to grasp the thought of the Stagirite. He was the best Aristotelean scholar and commentator of the Middle Ages. Albert had followed Avicenna's method of paraphrasing commentary; St. Thomas gives a literal exegesis of the text according to the method of Averroës. He lays stress upon the sequence of ideas, and points out the importance of various doctrines for the system of Aristotle. Albert's commentaries contain lengthy digressions, his own attitude toward the doctrines he expounds is not always clear, and he often fails to disengage the ideas of Aristotle from those of his Arabian commentators. St. Thomas clearly distinguishes Aristotle's thought from Neo-Platonic additions and erroneous interpretations. When he does not approve of Aristotle, he gives a clear and reasoned rejection of his teaching. His explanation of the text is concise and to the point. He frankly rejects the older Scholastic doctrines when they are incompatible

¹² For the chronology of the writings of St. Thomas see MANDONNET, *Des Ecrits Authentiques de S. Thomas d'Aquin* (Fribourg, 1910). GRABMANN, *Thomas von Aquin* (Kempten, 1912); *Die echten Schriften des hl. Thomas von Aquin* (Münster, 1920). MANDONNET in *Divus Thomas* (Piacenza), XXIX (1926), pp. 525 sqq.

with those of Aristotle. This mode of exposition was the chief factor which brought about the general study of Aristotle in Christian schools. St. Thomas's commentaries on Aristotle laid the permanent foundation of Scholastic philosophy. This is their principal merit.

196. Theologian.—The *Summa Theologica* is the greatest systematic exposition of Catholic theology. Its salient traits are completeness, unity, cogency, simplicity, and clearness. But the full thought of St. Thomas is obtained only by studying also the *Commentary on the Sentences* and the expositions of Holy Scripture. The *Quæstiones Disputatæ* also are of especial value, because they are full and detailed technical expositions of important doctrines. Considering these treatises together, we find that St. Thomas has a twofold method, which has long since become the common property of theologians: the proof of the Faith from the sources of revelation and its exposition and defence by the dialectical method. St. Thomas is careful to show that the doctrines of the Faith are above human reason, but not against it. He states the relation between faith and reason in these principles: (1) philosophy and theology are distinguished by their formal objects; (2) theological mysteries are superrational, but not anti-rational; (3) in some cases theology gives a final solution of philosophical problems which human reason unaided is unable to solve; (4) the Faith is the negative standard of philosophy (see above nn. 104 and 178).

197. Intellectualism. — The philosophy of St. Thomas centers about the intellect. He has full confidence in the power of the mind to know its object:

*parvum lumen intelligibile, quod nobis est connaturale, sufficit ad nostrum intelligere.*¹³ The will merely strives for its object; the mind holds it. The mind compels the assent of the will, when it presents to it the perfect good. The morality of human acts originates in the mind, and the freedom of the will is grounded on the practical judgment of the mind. St. Thomas rejects the doctrine of the special illumination of the mind in the process of cognition.

198. Fusion of New and Old.—St. Thomas frankly abandons those doctrines of older Schoolmen which are incompatible with his system. Thus, he rejects the doctrines of the hylomorphic composition of subsistent forms, the plurality of substantial forms, the *rationes seminales*, the identity of the soul with its faculties, and the primacy of the will. Yet he carefully studied his predecessors. He took over from St. Augustine and others of his own predecessors the identity of the intellect and the being of God, the power of creation as proper to God, conservation as the continuation of the act which created, exemplarism, Providence, evil, miracle, the immateriality of the soul, the purpose of man, the *lex æterna*.

St. Thomas is not a mere echo of Aristotle. He developed Aristotle's doctrine about God from a few meager though precious fundamentals into an extensive treatise. His treatise, *De Passionibus Animæ*, is an original work, which became the standard of Scholastic philosophy. He rejects the following doctrines of Aristotle: the real distinction between the *nous* and the *psyche*, the implied denial of personal immortality, a faculty of imagination for every sense, the denial of intellectual memory, the

¹³ *Summa contra Gentiles*, II, lxxvii. .

doctrine of the active and the passive intellect, many points in the doctrine about God, etc. As regards the value of the argument based on human authority, St. Thomas approves the statement of Boëthius: *locus ab auctoritate est infirmissimus*.¹⁴

St. Thomas was diligent in ascertaining and utilizing the achievements of his predecessors in philosophy and theology. Truth, he says, is to be accepted, from whatever source it proceeds.¹⁵ Truth, probability, and error must be carefully characterized as such.¹⁶ Science makes constant progress.¹⁷ The errors of others give us negative directions for research.¹⁸ Of all medieval scholars St. Thomas made the most extensive study of sources for his writings, and he was fortunate in having access to the best libraries, both in Paris and in Italy.

The chief of St. Thomas's original contributions to Scholastic philosophy are the doctrine of the unity of the substantial form, of subsistent forms, the theory of individuation through the quantity of matter, the real distinction of the soul and its faculties, and the intellectualistic conception of psychic life.

The system of St. Thomas was not from the beginning in its final stage of perfection. The influence of the older Scholasticism is noticeable in the *Commentary on the Sentences*. In the *Summa Theologica* he corrects former opinions.¹⁹

¹⁴ *Summa Theol.*, I, Q. i, a. 8, ad 2.

¹⁵ *In XII Met.*, lect. ix.

¹⁶ *De Potentia*, IV, 1.

¹⁷ *Summa Theol.*, I-II, Q. xcvii, a. 1. Cf. *In I Eth.*, lect. xi.

¹⁸ *In II Met.*, lect. i; *In I De Anima*, lect. ii.

¹⁹ III, Q. ix, a. 4, c; xii, a. 2, c; lxii, a. 6, ad 3. If the *Concordantia Dictorum Fratris Thomæ* should prove to be genuine, further examples will be found in it. See PELSTER in *Gregorianum*, IV (1923), 1, 85 sq.

The synthetic power of St. Thomas is unrivalled. His genius for systematization does not consist chiefly in the analytic grouping of vast masses of thought like those arranged in the three thousand articles of the *Summa*—though this is no mean achievement. It is found principally in his metaphysical derivation of details from general principles and fundamental facts. St. Thomas possessed an unequalled capacity for concisely and definitely establishing connections of co-ordination, subordination, and dependence in the field of pure metaphysics, and for showing their bearing on the problems of philosophy and theology.

199. Influence on Eastern Thought.—The influence of Western upon Eastern thought is notoriously insignificant, but it is a matter of interest to note that a few of the principal writings of St. Thomas have been translated into Greek. Demetrius Kydones translated the *Summa contra Gentiles*, the *Summa Theologica*, and several small treatises in the first half of the fourteenth century. Previous to this, Gregorius Akindynos translated the *Summa contra Gentiles*. Prochorus translated the treatise *De Æternitate Mundi contra Murmurantes*. Demetrius Kydones composed detailed directions for the study of the *Summa Theologica*. These translations are the more remarkable because of the schism of the Eastern Church.²⁰

200. St. Thomas in Catholic Schools.—As early as

²⁰ See DE RUBEIS in the Leonine Edition of St. Thomas, Vol. I, title xiii, ch. 8. RACKL, *Demetrios Kydones, als Verteidiger und Übersetzer des hl. Thomas* (Mainz, 1915). MANDONNET in *Dictionnaire de Théologie Catholique*, VI, 1, 885 sq. In 1657 the *Summa contra Gentiles* was translated into Hebrew by JOSEPH CANTES, O.P., Bishop of Marisco. Manuscript copies of other translations are extant in libraries in Athos, Milan and Rome.

1279 St. Thomas was declared *Doctor Ordinis* by the Dominicans. The influence of his teaching generally is told by the honorary Scholastic title *Doctor Communis*, which has already been mentioned. As the records of the Council of Trent show, St. Thomas's writings were constantly consulted by the Fathers and theologians of the Council. In 1567, shortly after the Council, St. Thomas was declared a Doctor of the Church. The philosophy and theology of St. Thomas were prescribed for Catholic institutions of learning by Pope Leo XIII in the Encyclical *Æterni Patris* (August 4, 1879). In the following year he declared St. Thomas the patron of all Catholic schools. Pope Pius X repeatedly inculcated the teaching of St. Thomas, not only in the Encyclical *Pascendi*, but also on the occasion of controversies (e.g., in the brief *Doctoris Angelici*, June 29, 1914). On July 27, 1914, the Sacred Congregation of Studies issued an official list of twenty-four "*Pronuntiata Principalia et Maiora*" of the doctrine of St. Thomas. The Code of Canon Law prescribes that in seminaries philosophy and theology must be taught "*ad Angelici Doctoris rationem, doctrinam, et principia*" (Canon 1366, §2). The opening words of the Encyclical *Studiorum Ducem*, issued on the occasion of the sixth centenary of St. Thomas's canonization, and the glorious title of "Universal Doctor" which he adds to the tributes of earlier Pontiffs, disclose the mind of Pope Pius XI on the study of the Angelic Doctor. A perusal of the history of the attitude of the Catholic Church toward the philosophy and theology of St. Thomas, as it is recounted in the Encyclical Letter *Æterni Patris*, shows that the present directions inculcating the

study of St. Thomas are merely a continuation and a development of the attitude which the Holy See has maintained during the past centuries.

201. Metaphysical Principles.—The metaphysical principles which constitute the foundation of the philosophy of St. Thomas are not subjective constructions of the mind. They are obtained by a careful analysis of physical and psychic facts, and are therefore as true and valid as these facts themselves. The following short list of these principles will serve to show at least the general outlines of the metaphysical system of St. Thomas.

I. PRINCIPLES ON ACT AND POTENCY.²¹

(1) *Actus simpliciter prior est potentia.* This is the basic principle of Scholastic philosophy. (2)

²¹ The following paraphrase may be helpful to those who are not fully conversant with Scholastic Latin.

I. Act and Potency.—(1) In the absolute sense, act is prior to potency. (2) Potency is actualized only by the action of a being already in act. (3) A being possessing goodness, truth, and actuality in a limited degree requires as its ultimate cause a being possessing goodness and actuality in an absolute degree. (4) The being which possesses any given perfection in an absolute degree is the cause of all other beings possessing this perfection. (5) Every being acts through the power of the ultimate agent. (6) Whatever is actualized, is actualized by another being. Every agent actualizes a potency in so far as it is itself actuality. (7) Possible or contingent being presupposes necessary being. (8) We must of necessity affirm the existence of a being which is in itself necessary. This being is a pure act.

II. Matter and Form.—(1) In every composite being there are components which are to each other as potency to act. They are matter and form. (2) Every agent acts through its form. (3) Every being composed of matter and form is perfect and good through its form. (4) Every perfection is derived from the form. An imperfection is present in a being in so far as its matter is in a state of privation. (5) All matter is determined to a definite kind of being by the form it has received.

III. The Exemplar Cause.—(1) All order is the work of intellect. (2) Beings which are incapable of knowledge do not strive for an end except as directed by a being possessing intelligence and knowledge. (3) In all things which do not become by chance (for the Scholastic concept of chance see the *Summa Theologica*, I, Q. xlvii,

Nihil reducitur de potentia ad actum nisi per aliquod ens actu. (3) *Magis vel minus bonum, verum, ens postulant maxime ens et bonum, quod est causa eorum.* (4) *Quod dicitur maxime tale in aliquo genere est causa omnium, quæ sunt illius generis.* (5) *Omne ens agit in virtute primi agentis.* (6) *Omne quod movetur, ab alio movetur; movet autem aliquid secundum quod est in actu.* (7) *Possibile vel contingens supponit necessarium.* (8) *Necesse est ponere aliquid quod est per se necessarium, et hoc est actus purus.* These principles are found in the *Summa Theologica*, Part I, Question ii, article 3. From them there follows the existence of an unmoved mover, who is a pure act; furthermore, the concept of creation (*Summa*, I, Q. xliv, a. 1), the universal concurrence of God, and the *motio divina ad actum*.

a. 1, paragraph "Quidam vero"), the form is the end of the becoming of each. Now an agent does not act because of a form, unless a similitude of the form is in it. Hence, we must affirm the existence of ideas in the divine intellect. (4) In everything, that which is the ultimate end is directly intended by the principal agent. (5) The highest perfection realized in the world is the good which consists in the order of the universe. (6) The order of the universe is such that the higher beings are more perfect than the lower, and that what in lower beings is found imperfectly, partially, and distributed among many beings, is in higher beings found in an eminent manner, as a kind of unit, and as a simple perfection.

IV. *The Final Cause.*—(1) What is first intended, is last attained. (2) Every agent necessarily acts because of an end. (3) An infinite series of ends is impossible. (4) Since every being strives for its own perfection, one strives for that as one's ultimate purpose which one seeks as the perfect good. (5) One strives for an end under the aspect of a good. (6) The good of the universe is prior to the particular good. (7) Change takes place because of an end. (8) God is the end of all. (9) The lower beings are directed by the higher. (10) An infinite series of efficient causes is impossible. Hence, it is necessary to affirm the existence of a first efficient cause, which all men term God.

The meaning and the bearing of these principles according to the mind of St. Thomas is to be sought, not so much in the *Summa Theologica*, where they are presupposed as known, as in the *Commentary on Aristotle's Metaphysics* and the short treatise *De Ente et Essentia*.

II. PRINCIPLES ON MATTER AND FORM.

(1) *In omni compositione oportet esse quæ se habent sicut potentia ad actum, et hæc sunt materia et forma.* (2) *Omne ens agit per suam formam.* (3) *Omne compositum ex materia et forma est perfectum et bonum per suam formam.* (4) *Omnis perfectio ex forma; imperfectio accidit rei secundum quod materia sub privatione invenitur.* (5) *Unaquæque materia per formam superinductam contrahitur ad aliquam speciem.*

III. PRINCIPLES ON THE EXEMPLAR CAUSE.

(1) *Omnis ordinatio est rationis.* (2) *Quæ non habent cognitionem non tendunt in finem nisi directa ab aliquo cognoscente et intelligente.* (3) *In omnibus quæ generantur necesse est formam esse finem generationis cuiuscumque. Agens autem non agit propter formam nisi similitudo formæ est in ipso. Ideo necesse est ponere in mente divina ideas.* (4) *In quolibet id quod est ultimus finis proprie est intentum a principali agente.* (5) *Illud quod est optimum in rebus existens est bonum ordinis universi.* (6) *Talis est ordo in rebus, quod superiora in entibus sunt perfectiora inferioribus, et quod in inferioribus continetur deficienter et partialiter et multipliciter, in superioribus continetur eminenter et per quandam totalitatem et simplicitatem (Summa, I, Q. lvii, a. 1).*

IV. PRINCIPLES ON THE FINAL CAUSE.

(1) *Primum in intentione est ultimum in executione.* (2) *Necesse est omnia agentia agere propter finem (I-II, Q. i, a. 2).* (3) *Impossibile est in finibus procedere in infinitum.* (4) *Cum unumquodque*

appetat suam perfectionem, illud appetit aliquis ut finem ultimum, quod appetit ut bonum perfectum (I-II, Q. i, a. 5). (5) Finis appetitur sub ratione boni. (6) Bonum universi precedit bonum particulare. (7) Motus propter finem est. (8) Deus est finis omnium. (9) Inferiora per superiora reguntur. (10) Non est possibile quod in causis efficientibus procedatur in infinitum. Ergo necesse est ponere aliquam causam efficientem primam, quam omnes Deum nominant.

202. Bibliographical Note.—An extensive bibliography on St. Thomas can be found in ÜBERWEG'S *Grundriss*, Vol. II, ed. BAUMGARTNER (10th ed.), pp. 166–178, and in *Bibliothèque Thomiste*, Vol. I: *Bibliographie Thomiste* by MANDONNET and DESTREZ (Kain, 1921. This volume lists 2219 numbers). The best edition of the works of St. Thomas is the Leonine Edition (14 volumes published, Rome, 1882–1926). Of the small editions, that of the *Summa Theologica* and the *Summa contra Gentiles* published by Forzani (Rome, 1894) contains the best text. CATHALA is the editor of a good eclectic text of the *Commentary on Aristotle's Metaphysics* (Turin, 1915. A knowledge of this commentary is indispensable for understanding the philosophy of St. Thomas). CAJETAN'S *Commentary on the Summa Theologica*, and FRANCISCUS OF FERRARA'S *Commentary on the Summa contra Gentiles*, are the best. SERTILLANGES, *S. Thomas d'Aquin* (Paris, 1910), and WILLMANN, *Geschichte des Idealismus*, Vol. II (2nd ed., Brunswick, 1907), are splendid expositions of St. Thomas's philosophy. The Dominican Fathers of the English Province have translated the *Summa Theologica* into English. The

Summa contra Gentiles has been partly translated into English by John RICKABY, S. J., under the title of *God and His Creatures* (London, 1915). THOMAS PÈGUES, O.P., is the author of an extensive commentary on the *Summa Theologica* in French. SCHÜTZ, *Thomas-Lexicon* (2nd ed., Paderborn, 1895), explains the technical terms of St. Thomas. GRABMANN's delightful booklets are far more valuable than is indicated by their modest brevity: *Thomas von Aquin* (Kempten, 1912); *Einführung in die Summa Theologica* (Freiburg, 1919); *Kulturphilosophie d. hl. Thomas v. Aquin* (Augsburg, 1925); *Das Seelenleben d. hl. Thomas* (Munich, 1924). PORTMANN, *Das System d. theologischen Summa* (2nd ed., Lucerne, 1903), is a splendid analysis of the *Summa Theologica*, sufficiently extensive to be really useful to the student (470 pp.). GILSON, *Le Thomisme* (Paris, 1920).

§ 6. THE CONFLICT BETWEEN THOMISM AND PRE-THOMISM

203. Opponents of Thomism.²² — The opposition against the philosophy of St. Thomas took the forms of literary controversy and ecclesiastical censure. It was caused by his preference for Aristotle and especially by his doctrine of the unity of the substantial form, which his opponents believed would lead to Averroism.

Within the Dominican Order, ROLAND OF CREMONA (d. 1250), the first Dominican professor in the university, HUGH OF ST. CHER (d. 1263), one of the

²² Thomism is here understood in a general sense, without the implications it came to have with the rise of the Thomist-Molinist controversy.

early commentators on the *Sentences*, and PETER OF TARENTEISE (d. 1276) were adherents of the old Scholastic doctrines. ROBERT KILWARDBY (d. 1279), the Dominican Archbishop of Canterbury, was a strong opponent of the Aristotelean School.

The opposition of the Franciscan scholars was more pronounced. MATTHEW OF AQUASPARTA (b. 1235/1240; d. 1302), a pupil of St. Bonaventure, shows a distinct aversion to the Aristotelean school in his *Quæstiones Disputatæ*, which were written in Rome and Bologna, thus bringing the conflict with Thomism to Italy. His *Quæstiones de Cognitione* defend the origin of knowledge in the *exemplar æternum*, and reject the Aristotelean theory on the ground that it contradicts Augustine. This is a plain allusion to St. Thomas. WILLIAM DE WARE'S theory of knowledge is Aristotelean, but he defends the ontological argument for the existence of God, which Thomas had rejected. WILLIAM DE LA MARE (d. 1308), an Oxford professor and friend of Roger Bacon, wrote the famous *Correctorium Fratris Thomæ* about 1277 or 1278, in which he censured one hundred and seventeen propositions of St. Thomas, most of them taken from the *Summa Theologica*. The Franciscans' attitude toward Thomas is apparent from the fact that the Minister-General in 1282 admonished the provincials to permit the *Summa* only in the hands of the "*lectores notabiliter intelligentes*," with the *Correctorium* added to its text. The writings of Duns Scotus and his school contain extensive criticism of St. Thomas. JOHN PECKHAM (1240-1292) was professor in Paris and in Oxford, and the successor of Robert Kilwardby as Archbishop of Canterbury. About the year 1270 he was

a pronounced opponent of St. Thomas in Paris, particularly concerning the unity of the substantial form in man and the origin of knowledge.

Among the secular professors at the University of Paris, HENRY OF GHENT (d. 1293) was the ablest representative of the older Scholasticism in the thirteenth century. This made him the natural opponent of the Aristotelean school, though he has certain Aristotelean leanings. In the theory of knowledge he endeavored to conciliate the older Scholasticism with Aristoteleanism. Besides the soul, he requires the *forma corporeitatis* in man. Henry was one of the theologians consulted by the Bishop of Paris when he condemned a number of Averroistic doctrines in 1284.

Ecclesiastical censure was the second form of opposition against the Aristotelean School. In a letter dated January 1, 1285, and another dated just five months later, John Peckham tells how, during his second Paris period, St. Thomas was reproved by the Bishop of Paris, the professors of theology, and his own brethren in religion for his doctrine of the unity of the substantial form. On March 7, 1277, STEPHEN TEMPIER, Bishop of Paris, condemned 219 propositions. Most of them were Averroistic, but St. Thomas's doctrine of the principle of individuation was also among them. On March 18 of the same year, Robert Kilwardby at Oxford condemned St. Thomas's doctrine of the unity of the substantial form in man. On October 29, 1284, and April 30, 1286, John Peckham also condemned the same doctrine. Yet Peckham was not an intransigent opponent of the new school. St. Augustine was his standard authority in philosophy, and Aristotle sec-

and only to him. But, where he could not conciliate them, he rejected the Stagirite. Robert Kilwardby would have proved an even more redoubtable opponent of the new School, had he not been created a cardinal in 1287 and thus taken from the field of battle to another place and to other work. In 1325 the then Bishop of Paris revoked Stephen Tempier's censures of the doctrine of St. Thomas.

204. Adherents of Thomism.—The friends of Christian Aristoteleanism could not remain idle in the face of this storm of opposition. The Dominicans were St. Thomas's first defenders. He was proclaimed *Doctor Ordinis* in five General Chapters held between 1278 and 1313. In 1313 they decided that none of their members should be sent to the University of Paris, before he had studied Thomas for three years. In 1315 they suspended one of their professors from his office and imposed a ten days' fast upon him, because he had spoken against Thomas.

They taught St. Thomas in their schools, as the excerpts which they made of his works show. REGINALD OF PIPERNO completed the *Summa Theologica* with materials taken from the *Commentary on the Sentences*. BERNARD OF TRILIA (1240–1292) developed St. Thomas's theory of knowledge.

The Dominicans also replied to the polemical treatises written against St. Thomas. At least five replies to William de la Mare's *Correctorium* are known. Contradictions and changes in the doctrine of St. Thomas were a favorite point of attack. This brought out a number of concordances in defence especially of the *Summa*. One of the ablest works of this kind is THOMAS DE SUTTON's *Liber de Concor-*

dia. THOMAS DE JORZ (d. 1310) took up the defence of Thomas in Oxford against Scotus. The ablest of all the early defenders of Thomas is HERVÉ DE NEDELLEC (d. 1323), a Dominican teacher in the Monastery of St. James in Paris. Besides the monographs *De Æternitate Mundi* and *De Unitate Formarum*, he wrote an unfinished *Defensa Doctrinæ Divi Thomæ*, which appears to be the first attempt at a complete exposition and defence of St. Thomas. Hervé is also the author of a number of polemical treatises against Henry of Ghent.

Finally, St. Thomas was defended against the censures of Paris and Oxford in a large number of treatises, which all are entitled *De Unitate Formæ*. The outstanding one of these works was written by EGIDIUS OF LESSINES, O.P. (d. after 1304), against Robert Kilwardby.

The defenders of the doctrines of St. Thomas were not confined to the Dominicans. Among the eclectics, EGIDIUS OF ROME (about 1244–1316), O.S.A., was not content with warding off attacks. He took the offensive, and contended that the doctrine of the plurality of forms is incompatible with the Faith. Taken to task by Bishop Stephen Tempier, he refused to recant; whereupon, the bishop withheld his master's degree, and had him removed from the university. After the death of this bishop, Egidius obtained his degree upon representations made by Pope Honorius IV and his own promise to retract his bold language. He made an abject apology. Among the seculars, GODFREY OF FONTAINES and PETER OF AUVERGNE were, in general, adherents of the philosophy of St. Thomas.

205. **Eclectics.** — Besides those who were either

outspoken opponents or adherents of the entire philosophy of St. Thomas, there were others who accepted a greater or lesser number of his doctrines and sought to combine the teachings of the earlier Schoolmen with them.

HENRY OF GHENT (d. 1293) maintains the older Scholastic doctrines in metaphysics, epistemology, and psychology. He teaches the real existence of prime matter apart from the form, independent existence as the principle of individuation, special illumination by God as the principle of knowledge, and the primacy of the will. By the latter doctrine he marks the transition from Thomas to Scotus.

GODFREY OF FONTAINES (d. after 1306) was a pupil of Henry of Ghent. After Henry, he was the most eminent scholar among the secular clergy in the University of Paris. He played a prominent part in the conflict between the seculars and the regulars. He was a defender of St. Thomas against the censures of Stephen Tempier and John Peckham. While he has St. Thomas's theory of knowledge, he denies the real distinction between essence and existence, and considers the substantial form the principle of individuation. He preferred the doctrine of the unity of the substantial form, but confessed his inability to refute the older doctrine.

EGIDIUS OF ROME (about 1244–1316) was a pupil of St. Thomas, and was the first of the Augustinians to hold a professorship in the University of Paris. He adopted the philosophy of St. Thomas generally, but still held to the *rationes seminales*, and rejected the real distinction between the active and the passive intellect. For Philip the Fair he wrote the celebrated treatise *De Regimine Principum*. His

book, *De Ecclesiastica sive de Summi Pontificis Potestate*, is said to be the first treatise defending the papal power by means of the principles of St. Thomas. In 1287 he was declared *Doctor Ordinis* by the Augustinians. He is the founder of the Augustinian School, which continued until the eighteenth century.

§ 7. DUNS SCOTUS

206. John Duns Scotus (about 1270–1308) was a native of the British Isles, but the date and place of his birth are unknown. He studied at Oxford under William de Ware, and taught in the university until 1304. In the following year he was sent to Paris to obtain the master's degree. He taught in Paris until 1308, when he died in Cologne shortly after being appointed to teach in that city. The principal writings of Scotus are: his commentaries on the logic, the metaphysics, and the treatise *De Anima* of Aristotle; the great commentary on the Sentences (*Opus Oxoniense*); a shorter commentary on the same work (*Reportata Parisiensia*, *Opus Parisiense*); *De Rerum Principio*.

Scotus distinguishes philosophy and theology, not only according to their formal, but largely also according to their material object. Human reason unaided, he teaches, cannot prove many of the attributes of God—His omnipotence, omnipresence, truth, and justice. It cannot prove that God has life, intellect, and will. It cannot prove that there is only one first cause, nor that the conservation of the world by God is required for its continued existence. Scotus maintains these theses, not because he is a sceptic, but only because he requires a greater degree of evi-

dence than human reason can give. Hence, when in some of his writings he does not apply the mathematically deductive method, he admits and proves the theses rejected above. The question of proving them, therefore, is for Scotus rather a matter of method than of fact.

For Scotus prime matter is not mere potency as it is for St. Thomas. Scotus distinguishes *materia primo-prima*, which is the basis of all created things and was created in the beginning by God; *materia secundo-prima*, which is the subject of substantial becoming and desition; and *materia tertio-prima*, which is the subject of accidental change. He further teaches the plurality of forms, requiring the *hæcceitas* as the principle of individuation, and in man the *forma corporeitatis*, besides the soul. He teaches the *distinctio formalis ex parte rei* for the specific degrees of being, a distinction difficult to conceive, which some of his followers identify with the logical distinction possessing a foundation in the object.

In general, Scotus has the Aristotelean theory of the origin of knowledge by abstraction, except that he says that the mind knows the particular prior to the universal. The soul is the substantial form of the body, but it requires also the *forma corporeitatis*, because prime matter without the latter form is incapable of receiving the soul. Scotus paid particular attention to the psychology of the will. Though the will is free, Scotus notes the influence of rational motives, habit, and inclination upon the will. He teaches the primacy of the will, not in the sense that the will is the fundamental faculty of man, but in the sense that it is the highest and noblest of his powers.

Happiness, the attainment of the highest good, is primarily in the will, not in the intellect. Applying this theory to God, Scotus teaches that the commandments of the Decalogue, excepting the first two, depend rather on the will than on the intellect of God.

In proving the existence of God, Scotus proposes not only the arguments from causality, finality, and the degrees of being, but also what he terms a "*coloratio*" of the ontological argument.

Duns Scotus is the founder of the Peripatetic School in the Franciscan Order. His philosophy is not a reversion to pre-Thomist Scholasticism, but an original shading of the Aristotelean system. The education of Scotus at Oxford brought him into contact with the empiric tendencies of English scholars during his formative period, with the anti-Thomist spirit, and with the influence of Roger Bacon. This environment undoubtedly was an important factor in shaping the intellectual development of his great genius. Scotus knew and utilized the work of his predecessors. But the range of his influence on Scholasticism was restricted by his predominantly negative criticism, his excessive subtlety, and the obscurity of his exposition. A revival of older Scholastic tendencies is noticeable in his reversion to St. Augustine and St. Anselm. He rates the authority of Avicenna highly. There is much implied criticism of St. Thomas in the writings of Scotus; but, though devoid of the highest constructive power of St. Thomas, he is next to him the greatest metaphysical mind of the Middle Ages. Yet he marks the beginning of the decline of Scholasticism.

§ 8. MINOR TENDENCIES

207. Neo-Platonic.—WITelo (b. 1220/1230) was a native of Silesia, and studied mathematics, science, and philosophy in Padua. His principal writings are the *Perspectiva* (in which he develops his “metaphysics of light”) and *De Intelligentiis* (a treatise on the nature and properties of the *formæ separate*).²³ DIETRICH OF FREIBERG (d. after 1310), a Dominican, studied and taught in Paris. He spent much time in the study of natural science, and inculcates the principle that observation is the source of knowledge in this field. In metaphysics he has the Thomistic doctrines of the unity of the substantial form, of prime matter as a pure potency, and of the active intellect as the principle of knowledge. He rejects the real distinction between essence and existence and the possibility of accidents existing without a subject. A pupil of Henry of Ghent, he was like his teacher a follower of St. Augustine rather than of Aristotle. He proposes a theory of emanation, but wards off all pantheistic interpretations of it. As compared with Aristotle and Averroës, the influence of Neo-Platonism upon Scholasticism was negligible.

208. Experimental. — ROGER BACON (1214–1294)²⁴ was born near Ilchester in Dorsetshire. He studied at Oxford under Robert Greathead and Adam Marsh. In 1244 he went to Paris, where he spent several years, and met the great Schoolmen at the university. Then he taught again in Oxford, but

²³ The genuinity of the latter work is not certain.

²⁴ See LITTLE, *Roger Bacon, Essays Contributed by Various Writers* (Oxford, 1914).

was obliged to abandon his work in 1257. Pope Clement IV was his friend, and asked him to send his *Opus Maius* to him. About the year 1277 or 1278 he wrote a defence of astrology, which Bishop Tempier of Paris had condemned. This work was censured by the Minister-General of the Franciscans, whom he had joined many years before, and Roger was obliged henceforth to remain in "prison" in the monastery. His principal writings are the *Opus Maius* (a treatise on astronomy, astrology, optics, and mathematics), the *Opus Minus* (a compendium of the foregoing), and the *Opus Tertium* (a supplement to the first mentioned).

Roger Bacon's philosophy is a reversion to the older Scholasticism. He teaches the theory of special illumination, of seminal reasons, of the hylo-morphic composition of all creatures, and of the plurality of forms. Philosophy is valuable only as an aid to theology.

The importance of Roger Bacon lies in other domains of science. He had the Oxford bent for empiric science. Mathematics is the one perfect science to him, because of its method of demonstration. He declares it to be the foundation of all scientific knowledge, somewhat in the sense of Robert Greathead's metaphysics of light. His treatise *De Speculis* has recently been termed a model study of a problem in mathematical physics.²⁵ He stressed the connection of the sciences and the aid which they consequently render to each other. He insisted on the study of languages as the indispensable prerequisite for the interpretation of texts and the knowledge of sources.

²⁵ LITTLE, *op. cit.*, pp. 229-40.

209. **Raymond Lully** (1235–1315) was a native of the Island of Majorca. At the age of thirty he left his family to devote the remainder of his life to overcoming Averroism. For this purpose he wrote the *Ars Magna* and a large number of other treatises. In 1288 he lectured in Paris in the endeavor to spread his ideas, but met with no success. He submitted plans to several Popes for crusades and missions among the pagans, but they were found to be undesirable. At his suggestion the erection of professorships for Oriental languages at the principal universities was determined at the Council of Vienne. He spent the last years of his life as a missionary in the Barbary States, where he is said to have died a martyr.²⁶

The *Ars Magna* is a general theory of science, in which all scientific knowledge is claimed to be derived by the combination of a system of fundamental subject and predicate concepts. Lully was the first man to propose the problem of a general theory of science. This valuable idea must not be confused with the mechanical expedients of revolving triangles and circles by which he endeavored to popularize it.

Confronted with the Averroistic doctrine of double truth, Lully laid great stress upon the rational aspect of the doctrines of faith, more in the sense of the reasons of congruence, than of a rationalistic conception of revelation. Lully was an opponent of Thomism in philosophy, and reverted to the doctrines of the older Scholasticism, continuing the

²⁶ Raymond Lully must not be confused with the Jewish convert, who was his namesake, and whose teachings were censured by Pope Gregory XI.

traditions of the Franciscan Order, of which he was a member.

210. Scholasticism and Science.—The Schoolmen have often been reproached for their ignorance of science and of the facts which are to-day common knowledge in experimental psychology. Their imperfect concept of nature and its laws is even said to have made fruitful work in philosophy quite impossible.

In considering this criticism, it must be remembered that there are extensive fields in philosophy in which excellent work can be done without any technical knowledge of the natural sciences. Such work was done by the Greeks long before the days of the Schoolmen. Besides achieving astonishing results in such fields as architecture, the Middle Ages represent vast progress over the ancients in logic, metaphysics, psychology, and ethics.

Furthermore, an accurate study of the Middle Ages shows that their knowledge of nature was not at all so insignificant as their detractors would have us believe. As there are no scientific editions (and in many cases no printed editions whatever) of many of the medieval scholars, a final judgment on this subject is impossible until all the evidence has been studied. The sources which are now accessible show that the study of nature was carried on throughout the period of Scholasticism. The Schoolmen used and studied all the scientific works of the ancients and of the Arabs which they were able to obtain. The study of Aristotle alone would have been sufficient to give the Schoolmen a sense of reality, and to make them careful to found their metaphysics on whatever facts were accessible to them, for none of

the ancients possessed a more keen sense of reality than did Aristotle. Even the possession of the most advanced scientific knowledge has not been able to prevent aprioristic and subjective constructions of history, science, and philosophy in our own times. Hence, if the Schoolmen failed in this regard, it was not because they lacked scientific knowledge. They had a real interest in anatomical questions which throw light on the physiology of the senses and on the physical aspect of psychic processes. The history of medicine in medieval times is making this fact increasingly apparent. The studies in optics which were made by Robert Greathead, John Peckham, Witelo, Dietrich of Freiberg, and Roger Bacon, were partly inspired by psychological interest.

The recently published autographs of Albert the Great show that he was a keen and independent observer of plant and animal life. Pierre Duhem credits him with remarkable observations in geology. Peter of Maricourt, whom Roger Bacon terms "*dominus experimentorum*" and "*experimentator fidelis*," wrote a treatise on the magnet and his experimental methods in studying it. Roger Bacon himself sets up the experiment as the principle of scientific research, and his own work in many fields of science is even to-day highly reputed by those who have taken the trouble to study it.

Duhem has further shown that in the fourteenth century the Schoolmen at the University of Paris anticipated Galileo's mechanics and the Copernican astronomy. St. Thomas already considered the Ptolemaic system only as a hypothesis.²⁷ In 1322

²⁷ *Summa Theol.*, I, Q. xxxii, a. 1, ad 2; In II *De Caelo et Mundo*, lect. xvii.

Francis Mayron wrote that a professor in Paris was then teaching the motion of the earth and the fixity of the heavens as the more probable hypothesis. In Duhem's opinion Nicholas of Oresme (d. 1382) proved the daily movement of the earth and the fixity of the heavens with more clearness, certainty, and precision than Copernicus. His discovery of analytical geometry and of the so-called Cartesian co-ordinates antedates Descartes by two and a half centuries. He also formulated the law of gravitation long before Galileo's time. John Buridan (d. 1360?) and Albert of Saxony (d. 1392) had substituted a dynamic system for the star-spirits of the Aristotelean physics.

CHAPTER III

AVERROISM

211. Siger of Brabant (b. about 1220/1230; d. 1282/1284) was the leading Averroist of the West. He received minor orders, was a canon in Liège, and professor of philosophy in the University of Paris. He was the head of the extreme Aristotelean party, and, supported by adherents of the older Scholasticism, led the opposition against St. Thomas. Despite his anti-Christian philosophy, Siger desired to remain true to the Faith, and for this reason he invented the doctrine of the double truth. But, as his philosophy was manifestly incompatible with the Faith, Bishop Stephen Tempier of Paris condemned a number of his teachings on December 10, 1270. But Siger and Boëthius of Dacia continued their teaching until his whole work was condemned in a list of 219 propositions by the Bishop of Paris on March 7, 1277. Siger now left Paris, but in the same year the Grand Inquisitor, Simon du Val, cited him before his court. Siger appealed to Rome, and set out for the papal court in Orvieto, where he was murdered by his demented secretary.

Averroism is the philosophy of Averroës and his disciples, who, in their effort to found a deductive philosophy independent of theistic and Christian doctrine, taught a pantheistic form of monopsychism

based on an imperfect and often erroneous interpretation of Aristotle. The Averroists accepted blindly the doctrines of Aristotle and of Averroës, his "infallible" commentator. Although Averroism agrees with Scholasticism in certain secondary theses (such as the doctrine of the unity of the substantial form), it is fundamentally anti-Scholastic, because it rejects the cardinal teachings of Scholastic philosophy and theology. Because of the occasional agreement of Averroism with Scholasticism, Archbishop Peckham suspected the School of Albert and Thomas of Averroism.

Against the Scholastic doctrine of the origin of ideas and of the substantial union of the human soul with the body, Averroës and his followers taught monopsychism. Against the doctrine of the future life and retribution, they held that there is no personal immortality. Against the doctrines of creation, conservation, concurrence, and providence, they placed their doctrine of emanation. Against ethical responsibility and free will, they maintained cosmic and psychological determinism. Against the contingency of the world and the freedom of God, they taught that the emanations are necessary and co-eternal with God. Their doctrine of the double truth teaches that what is true in theology and revelation, may be false in philosophy, and vice versa.

The principal work of Siger is the treatise *De Anima Intellectiva*, which deals with fundamental questions of philosophy on which Aristotle did not clearly express himself. St. Thomas's *De Unitate Intellectus* is a direct reply to this work. Siger taught that the intellectual soul cannot be the substantial form of the body, because thus it would in-

form an organic substance, and hence be material. The immaterial soul is only one in number, because by its nature it excludes matter, the principle of individuation. From time to time, the intellectual soul, which exists apart from the body, is united with it in order to posit the act of thought; this union is sufficient to make the act attributable to the individual.

Despite its condemnation by the Church and its refutation by St. Thomas, Albert the Great, Egidius of Rome, and others, Averroism found adherents in the West, such as JOHN OF JANDUN and PETER OF ABANO in the fourteenth, and PAUL OF VENICE and others in the fifteenth century.

Section III

THE PERIOD OF DECLINE: 1300-1450

CHAPTER I

THE CAUSES OF THE DECLINE OF SCHOLASTICISM

212. Causes.—The decline of Scholastic philosophy, which followed so rapidly after its culmination, was due to the incapacity of its exponents, to the decadence of studies in the universities, and to the encroachment of anti-Scholastic systems, which the Schoolmen of this period were unable to resist.¹

(1) **INCAPACITY OF THE SCHOOLMEN.**—(a) This period is devoid of initiative and originality. The Schoolmen of this time did not devote themselves to speculative study, nor to empiric investigation, nor to historical research. They spent their strength in defending the authority of their Schools and masters. In the Religious Orders, this condition was brought about largely by the obligation of teaching the doctrines cultivated by the chief interpreters of the founders of their Schools. Thus, this period became the age of the compendium, a characteristic in which it resembled the last period of Greek philosophy. (b) By the revival of nominalism the doc-

¹ DE WULF, pp. 507 sqq.

trinal system of the Schoolmen underwent a great change. Occam was Scholastic, but his general tendencies led his followers away from Scholasticism. (c) An inexcusable ignorance of the Scholastic system gradually came about. The early nominalists were still acquainted with the best Scholastic thought, but their successors—both those who professed the decadent Scholasticism, as well as those who sought a new philosophy—were ignorant of it. (d) Style and method degenerated. Instead of the clear and simple language of the classic period, barbarous Latin became the rule. A multiplicity of hair-splitting distinctions replaced the keen and incisive thought of earlier times. (e) Philosophical problems were made to serve as material for the study of dialectics. Thus, the scientific instincts of the mind were perverted.

(2) THE DECLINE OF STUDIES.—(a) With these conditions given, the philosophical work carried on in the universities took on a superficial character. Light work leading to immediate results took the place of the long and patient toil of the researcher, and the result was a baneful mediocrity. (b) Short courses leading to degrees were established in the universities, examinations were often reduced to the level of formalities, degrees became venal, and comfortable benefices drew scholars from their work. (d) The wars between England, France, and Flanders, the fearful scourge of the Black Death, and the competition for students in the many new universities which now were being established, led men away from scientific pursuits.

(3) HOSTILE CURRENTS.—(a) Western Averroism, though broken, continued to live in such leaders as

JOHN OF JANDUN and MARSILIUS OF PADUA at the University of Paris. The beginnings of modern pantheism are found in the heterodox mysticism of this time. (b) Other tendencies hostile to Scholasticism were caused by the perversion of Occam's teachings, by the introduction of theological determinism, and by the profession of bizarre doctrines for their own sake. Thus, THOMAS BRADWARDINE (d. 1349) taught: *nulla ratio nec lex in deo est prior eius voluntate*. In the fourteenth century, NICHOLAS OF AUTRECOURT taught a system of complete subjectivism, and claimed to have been sent by God for the reform of science. JOHN OF MIRECOURT, a Cistercian who taught in Paris, drew the logical inferences from Bradwardine's teachings: man has no free will; God is the cause of sin; sin is rather a good than an evil act. All of these philosophers taught that reason cannot prove the existence of God, and made the intellect of God subject to His will. Thus, they inaugurated a system of complete subjectivism, which spelled ruin and "Reformation."

CHAPTER II

THE REVIVAL OF NOMINALISM

213. Preparation.—The revival of nominalism is a feeble attempt at original thought, which came as a reaction against Thomism and Scotism. The way for nominalism, or terminism, as it was called, was prepared by DURAND OF ST. POURÇAIN (d. 1332), a Dominican, and PETER AUREOLI (d. 1322), a Franciscan. From a disciple of St. Thomas, Durand became an opponent. He taught that the universal does not exist in any manner outside the mind, which has a direct perception of the particular. Hence the *species intelligibilis* and the active intellect are superfluous for the explanation of the formation of our concepts. Peter Aureoli likewise denied the existence of the universal outside the mind. The difference between a general and a particular concept, he says, lies in the difference between a vague and a distinct perception of the object.

214. William Occam (d. 1349/1350).—**LIFE.**—William was an English Franciscan, and was born at Ockham in Surrey. He studied in Oxford and taught there from 1318 until 1322, when he was cited before the papal court in Avignon to answer charges of heresy. In 1328 he fled to the Emperor Louis in Pisa, and was excommunicated. In 1330 he accompanied the Emperor to Munich, whence he began to

attack the Pope. His relation to the Emperor is characterized by the statement attributed to him: *Tu me defendas gladio, ego te defendam calamo*. After the Emperor's death, he sought to reconcile himself with the Church and with his Order. He is said to have died from the Black Death. His principal writings, which were composed in Munich, are a *Commentary on the Sentences*, a treatise on logic, smaller philosophical treatises, and the *Dialogus inter Magistrum et Discipulum de Imperatorum et Pontificum Potestate*.

PHILOSOPHY.—Occam denies the existence of the universal both within and without the mind. Only the individual exists, and is the object of cognition. The apparent universality of the concept, and of the word or sign expressing it, consists in its predicability of many objects, or its capacity of standing for them. The universal is no more an image of an object than smoke is an image of fire, or a sigh of pain, or laughter of joy. The universal is a mere construction of the mind (*purum figmentum intellectus*).

Reason cannot prove that the soul is immaterial or imperishable. The proofs of the existence of God are merely probable. The will is the highest faculty of the soul. The origin of the soul is unknown.

The entire moral law, including the law of nature, is founded solely on the will of God. The good is such only because God wills it. The Bible is the only source of revelation.

HISTORICAL POSITION.—The system of Occam is the last of the great Scholastic systems of philosophy. Later nominalists gave Occam the honorary title of "*Venerabilis Inceptor*," the venerable restorer of

nominalism, although "*inceptor*" in common medieval usage signifies "*doctor*." Occam intends his position to be Scholastic, but it leads directly to agnosticism. His philosophy is the beginning of the end of Scholasticism, because its fatal consequences are incompatible with the Scholastic doctrines. The teachings and the mental attitude of Occam furthered the conflict between the Emperor and the Pope. By centering attention upon the particular, Occam fostered in an indirect way the rise of the sciences. The forerunners of modern science had Occamistic leanings.

The University of Paris was the center from which the influence of nominalism proceeded. It was forbidden by the University in 1339, and again in the following year. But its novelty and the reaction against the decrees forbidding it led to its wider diffusion. Its adherents are found in the Universities of Paris, Vienna, Cologne, and Heidelberg. The leading Occamists in Paris were JOHN BURIDAN (fourteenth century), ALBERT OF SAXONY (d. 1390), NICHOLAS OF ORESME (d. 1382), PETER D'AILLY (1350-1420), and JOHN GERSON (1363-1429).

CHAPTER III

THE ARISTOTELEAN SCHOOLS

215. Scotists.—The Scotist School continued to develop the teachings of its founder. FRANCIS MAYRON (d. 1325), a native of Meyronnes in France, is the most important member of this School. He taught in Paris, and is said to have introduced the *actus Sorbonnicus*. The title “*Doctor Illuminatus*” testifies to the respect in which he was held. His principal work is the *Commentary on the Sentences*. His *Tractatus de Formalitatibus* contains the first literary discussion of the *distinctio formalis*. Scotistic subtleties are characteristic of his writings. One of his distinctive teachings is the doctrine of the subsistence of the ideal essences independently of God, and the independence of intrinsic possibility and impossibility from God.

FRANCIS MAYRON, ANTONIO ANDREA (d. 1320), JOHN DE BASSOLIS (d. 1347), and WALTER BURLEIGH (d. after 1343) were pupils of Duns Scotus.

THOMAS BRADWARDINE (about 1290–1349), a native of Chichester, was educated in Oxford, and later taught in Merton College. Various appointments took him away from the studies to which his mind turned. He was renowned in Oxford for his knowledge of Aristotle and Plato and for his mathematical studies. But he was made Proctor of Merton College, chaplain to Edward III, and Chancellor of St.

Paul's. In the year of his death he was consecrated Archbishop of Canterbury in Avignon.

The general tendency of Bradwardine's philosophy and theology appears in the object of his principal work, *De Causa Dei contra Pelagium*. His general purpose is to combat Pelagianism, by which he means the spirit of rebellion against God as it is shown in man's endeavor to emancipate himself from the law and the control of God's omnipotence and universal causality. The mathematical form of proof is characteristic of Bradwardine.

In his treatise *De Causa Dei* Bradwardine mentions only the ontological argument for the existence of God, and lays stress on the impossibility of the infinite series, which Occam had denied. God is the foundation of all truth. The knowledge of God is twofold: simple intuition and composite judgment. The will of God is the medium through which He forms the complex judgment. The free will of God is the cause of the creation. The will of God is the ultimate reason of moral good and evil. There is no intrinsic distinction between them.

The free will of man is defined as *potestas rationalis rationaliter iudicandi et voluntarie exequendi*. The actions which proceed from man's free will are determined from eternity by God. This does no violence to man's free will, because it is the nature of the will to be thus determined. There is, so to say, a pre-established harmony between both. The free acts of man remain imputable, because it is the nature of the will to be thus necessitated by God. No creature can determine the will in this way. The substance of the evil act is caused by God; its defective character is caused by man.

Bradwardine's doctrines gave rise to heated controversies. His Carmelite friend, John Baconthorp, says that he was reproved for many of his teachings. Wyclif was an enthusiastic follower of Bradwardine. John of Mirecourt seems to have drawn much of his teaching from Bradwardine. But it is principally through Wyclif that Bradwardine exercised a wide influence. Bradwardine is an even more important figure in the history of mathematics.

216. Thomists.—The Dominican, Cistercian, and Carmelite Orders were the home of the Thomist School, the principal school of Scholastic philosophy in this period.

JOHN CAPREOLUS, O.P. (d. 1444), called *Princeps Thomistarum*, is the best medieval expositor of St. Thomas. His *Libri Defensionum* are an exposition of the *Sentences* according to the mind of St. Thomas.¹ He expounds the doctrines of St. Thomas in the very words of the great Doctor, and takes into consideration all the objections raised against his teaching in the course of medieval philosophy and theology. Capreolus is the creator of the Thomist School.

ST. ANTONINUS (Pierozzi, O.P., d. 1459), Archbishop of Florence, wrote an extensive treatise on moral theology, which is important for philosophy because he applies the principles of St. Thomas to new fields. He is one of the first of the Scholastic thinkers to discuss questions of values, prices, pro-

¹ The *Sentences* were the standard text-book in theology until the sixteenth century, when they were superseded by the *Summa Theologica*. The principal reason why the *Sentences* held the field during the entire period of medieval Scholasticism is found in the Fourth Lateran Council's approval of Peter Lombard's doctrine of the Trinity. See DENZIGER-BANNWART, *Enchiridion*, n. 432.

duction, wealth, wages, civil authority, the right of war, education, etc.

217. The Augustinian School.—This School, which followed the philosophy of Egidius of Rome, was spread mostly in Italy. Its leading member during this period was GREGORY OF RIMINI (d. 1358), who was appointed professor in the University of Paris in 1345 at the request of Pope Clement VI. In 1351 he was transferred to the Monastery of Rimini, and elected Superior of the Order in 1357. He died in Vienna, universally respected for his scholarship and his priestly character.

The psychology of cognition propounded by Gregory of Rimini is similar to that of Occam, but he did not limit the object of human knowledge to the narrow bounds of the nominalists. He set himself into conscious opposition to St. Thomas, whom he often quotes to refute.

CHAPTER IV

MINOR TENDENCIES

218. Mysticism.—The decline of philosophical studies and the controversies between the Schools caused many earnest seekers after God to turn away from science to mystical contemplation. A typical expression of this state of mind is found in the third chapter of the first book of *The Imitation of Christ*. Thus, mysticism has a connection with philosophy in so far as it turned many from nominalism, and thus to a certain extent prevented its spread. The principal mystics of this time are JOHN RUYSBROECK (1293–1381), GERARD GROT (1340–84), THOMAS A KEMPIS (1380–1471), and JOHN GERSON. MASTER ECKEHART OF HOOCHHEIM (about 1260–1327) taught a pantheistic form of mysticism, according to which God is the existence of the soul. His principal merit is the translation of philosophical terminology into the German language.

219. Raymond of Sabunde (d. 1432), said to be a native of Barcelona, taught theology in the University of Toulouse. His *Liber Creaturarum* is written in the spirit of Raymond Lully. He is an Occamist in the psychology of cognition, and in the use which he makes of it as the foundation of his philosophy. He identifies the content of revelation with philosophy.

220. **Nicholas Chrypffs** (1401–64), commonly called **Nicholas of Cusa**, was created a cardinal in 1448, and appointed Bishop of Brixen in 1450. Nicholas turned back from the decadent Scholasticism of his time to Neo-Platonism, especially to Pseudo-Dionysius. Nature requires revelation, he says, and reason proves its doctrines. Some of his characteristic doctrines are: (1) *Docta ignorantia* (we cannot know the infinite). This is the principle of a new theology, which is opposed to the teachings of the Schoolmen; (2) *Coincidentia oppositorum* (contradictions disappear in God, because He is absolute truth); (3) *Omnis humana veri positio est coniectura* (all human knowledge is conjectural, because man has no positive knowledge of the infinite).

Nicholas was active in many fields of knowledge. He proved the forgery of the *Donatio Constantini* and of Pseudo-Isidore, and proposed to the Council of Basle a scheme for the reform of the calendar.

Section IV

THE PERIOD OF TRANSITION: 1450-1600

CHAPTER I

INTRODUCTION

221. Characteristics.—This period marks the end of the civilization of the Middle Ages. The Renaissance movement, which concludes it, is in philosophy essentially a time of transition. In the general history of the world this period brought radical changes in religion, science, politics, and in the economic and social conditions of life.

The so-called Reformation is the great religious revolution which took place during this period. It falsified many parts of Catholic doctrine, interrupted the course of legitimate reform in the Church, and substituted many national churches for the one universal Church.

The political history of this period centers about the formation of the European nations. The political solidarity of the Christians in Western Europe gave way to many national states pursuing different politics. National rivalries also increased the opposition of political sovereigns against the papacy, and prevented united action against the advance of the Turks. The feudal system was succeeded by new

social forms, and the population began to concentrate in towns and cities. The great discoveries of this period revolutionized the economic life of Europe and shifted its commercial centers.

222. Intellectual Life is Rejuvenated.—Humanism and the Renaissance are a return to the mentality and to the literary forms of antiquity. Italy is the birthplace of this new life. Its division into many small states made it well adapted to foster and spread many different systems of philosophic thought. From Italy the Renaissance spread to France, England, Germany, and the Low Countries.

223. Causes.—There were three principal causes of the Renaissance. The invention of printing increased the exchange of ideas, and was the prime factor in the spread of the newly found works of the ancients. The departure of Greek scholars from Constantinople after the capture of the city brought the glamor of Greek culture and science to the West. Literary, scientific, and ecclesiastical contact with the East had rendered the mind of the West receptive for the new ideas which now came to it.

224. Forms.—The Renaissance took several forms. (1) In many instances it was the return to the ancient forms in art and literature. (2) Again it was the adoption of the philosophy of the ancients. (3) It also took the form of a return to pagan ideas in science and in morality. (4) Finally, the great discoveries of this age focused the minds of scholars on nature and history, and resulted in a predilection for empiric science.

225. Classification of Philosophy.—I. A group of transition systems, philological, Platonic, Aristotelean, or Stoic in character, resulted from an un-

critical admiration of the ancients. II. Sectarian tendencies and naturalistic and sceptical systems were generally hostile to Scholasticism. III. Unfavorable social conditions and increasing individualism made the Religious Orders almost the sole refuge of Scholasticism.

CHAPTER II

TRANSITION SYSTEMS

226. Character.—(1) The hostility of the transition systems to Catholic doctrine is often based on the Scotistic and Occamistic assertion that certain Catholic dogmas are irrational. (2) The hostility of the transition systems of philosophy to Scholasticism is commonly due to the fact that they knew only the vitiated and degenerate forms of Scholastic doctrine which were current in their own time. They were quite ignorant of the doctrines of the classical age of Scholasticism. (3) The exuberant and boastful sense of power, which enthralled so great a part of the Renaissance, caused a dissipation of philosophical effort, preventing unity of aim and achievement.

227. The Humanistic Philologists.—Among the humanistic philologists who ranged themselves against the Schoolmen were LAURENTIUS VALLA (1407–57), LOUIS VIVÈS (1492–1540), PETER DE LA RAMÉE (1515–72), RUDOLPH AGRICOLA (1442–85), and WILLIAM TEMPLE (1553–1626). Generally speaking, the contention of these men, who represent every part of Western Europe, was that science alone can develop the mind and the character of man. They reduced philosophy to dialectics, and the latter to

rhetoric. The application of these principles to practice resulted in violent hostility to and in contempt for Scholasticism, but they did much to further the study of the ancient languages. The Scholasticism which was the object of their aversion was a decadent form, but they made no effort to ascertain the teachings of the great Schoolmen.

228. Platonists.—The Byzantine scholar, GEORGIUS GEMISTUS PLETHON (1355–1450), who attended the Council of Florence, was the founder of the Platonic School. At his suggestion Cosimo de Medici established the Platonic Academy at Florence. Plethon was a Neo-Platonist. After the Council he returned to the East, but the conflict which he had begun continued in the West until CARDINAL BESSARION (1403–72) launched his impossible policy of pacification, according to which Plato and Aristotle taught substantially the same philosophy, differing only in terms. MARSILIUS FICINUS (1433–99) was the greatest of the Italian Platonists. He spent his efforts in the spread of Platonism, because he believed it the best means of overcoming Averroism. At the age of forty he became a priest, and sought to utilize Platonism for Catholic theology by appealing to the speculative ideas of Clement of Alexandria, Origen, and St. Augustine. His career was cut short by the fall of Lorenzo de Medici.

HISTORICAL POSITION.—The rise of Platonism in Italy was due to the study of esthetics. The Platonists had an aversion for Aristotle because of his abstract conception of philosophy, and also because the Averroists explained him in a materialistic sense. The Platonist movement of the Renaissance was an ephemeral current. Plato was misunder-

stood, and sometimes his doctrines were identified with those of Aristotle.

229. Aristoteleans.—There were two parties of Aristoteleans. (1) The Averroists, who misunderstood Aristotle in the sense of Averroës. Their leader was ALEXANDER ACHELLINUS (1463–1518), who denied free will, Providence, and personal immortality. (2) The Alexandrians, who understood Aristotle in the sense of Alexander of Aphrodisia. Their leader was PETER POMPONAZZI (1462–1525), who denied free will, personal immortality, and creation.

230. Atomism. — PETER GASSENDI (1592–1655), who taught successively philosophy, theology, and mathematics, was one of the clerical opponents of Scholasticism. His theory of atomism is that God in the beginning created the atoms, and that by His will they were united to constitute bodies. He fails to explain the psychology of cognition, and accepts free will as a fact of experience. He attributes two souls to man: the intellectual soul as the principle of intellectual life, and the sense soul as the principle of organic life.

231. Naturalism. — The naturalistic philosophers received their name because they proceed from the esthetic study of nature. The sciences of observation are the fruit of the efforts of these philosophers. BERNARDINO TELESINO (1508–88) is the most important representative of this group. He taught that intellection is the transformation of sensation. Ethical actions are based on the instinct of self-preservation. There is no essential difference between man and beast. THEOPHRASTUS PARACELSUS (1493–1541), of Hohenheim, sought to combine Neo-

Platonic, astrological, and magical theories. His philosophical views, which are a maze of facts and fancies, can hardly be taken seriously. GIORDANO BRUNO (1548–1600) was a materialistic pantheist. He maintained that the universe consists of an infinite number of worlds. The principle of the universe is passive matter, which is identical with the world-soul (or God), its active principle. Bruno's philosophy contains no principle of progress.

232. Ethics.—The ethics of this period are principally a study of the philosophy of right. BLESSED THOMAS MORE (1478–1535) outlines (perhaps in an ironical vein) a communistic state in his *Utopia*. The second book of this work discusses the independence of the Church from the State, and justifies the indifference of the State toward the Church. In his treatise *De Iure Belli et Pacis*, HUGO GROTIUS (1583–1645) made the distinction between natural and positive law (which the Schoolmen had proposed long before his time) current in modern jurisprudence. Natural law is that which follows necessarily from man's nature. As man is by his nature destined for society, everything which is opposed to the good order of human society is unlawful. The State originates through the social contract, and sovereignty through delegation by the people. The State has the sole right to punish evil-doers. The purpose of punishment is always improvement—partly of those who are punished and partly of the rest of the nation. The State may suppress its own subjects who are the enemies of true religion—that is, those who deny the existence of God or moral responsibility—and it may make war upon the subjects of other nations, when they are such enemies.

The many currents of thought here briefly sketched show a chaotic condition of philosophy. They all agree in combating Scholasticism, but are themselves devoid of objective criticism and constructive ideas. They also contain the germ of modern pantheism. Grotius is a solitary exception.

CHAPTER III

SCHOLASTIC PHILOSOPHY

233. Schools.—During this period Scholastic philosophy was represented by three Schools—the Dominicans, the Jesuits, and the Occamists. Outside these Schools it was in a state of decadence. Its weakness was due to the prevailing preference for secondary matter and ignorance of Scholastic doctrine. Its adherents proved themselves poor defenders of a noble heritage, because they were indifferent to opposing systems and to the progress of science, and because they were not versed in physical and historical studies.

234. Thomists.—The Dominican School is distinguished by two illustrious names. FRANCIS SILVESTER OF FERRARA (1474–1528), who wrote the classical commentary on the *Summa contra Gentiles*, and CARDINAL THOMAS VIO (1469–1534), commonly called CAJETAN from his native city Gaeta, the author of the standard commentary on the *Summa Theologica*. Cajetan's commentary on St. Thomas's *De Ente et Essentia* is equally renowned. He is a master of the Aristotelean philosophy, but his conciseness sometimes obscures his thought. The avoidance of useless distinctions and digressions, which are found in many Scholastic works of this time, is characteristic of Cajetan. His treatise *De Analogia* is famous in the Thomist School.

235. The Spanish Renaissance of Scholasticism.—

The revival of Scholastic philosophy and theology in Spain was brought about by the reaction against the so-called Reformation and by the stimulus given to ecclesiastical studies by the Council of Trent. Spanish Scholasticism took its rise in Salamanca, Alcalá, and Coimbra. In Salamanca the Jesuits superseded the *Sentences* as a text-book by the *Summa Theologica*. Two groups of scholars, Dominicans and Jesuits, brought about the Renaissance of Scholasticism in Spain.

I. DOMINICANS. — FRANCIS DE VITTORIA (about 1480–1546) is the father of Spanish Scholasticism. He studied in the Dominican Convent of St. James in Paris, and taught in the university from 1516 until 1521. Having returned to Spain, he taught at Valladolid for four years, until he was appointed the first professor of theology at the University of Salamanca. His eminence lies not only in his own work, but also in the pupils whom he trained. Abandoning polemics, he cultivated theology as a constructive science. He put his vast knowledge of the Fathers and of ecclesiastical history into the service of theology, and returned from the mongrel Latin of his time to the standards of better days. His principal work, in which many philosophical doctrines are discussed, are the *Relectiones XII Theologicæ*. His famous pupils are Melchior Cano, Bartholomew Medina, Dominic Soto, Martin de Ledesma, and Dominic Bannez. JOHN OF ST. THOMAS (1589–1644) studied philosophy at Coimbra and theology at Louvain. He taught at the University of Alcalá from 1630 until 1643. He is esteemed as one of the most reliable commentators of St.

Thomas. His principal writings are the *Cursus Philosophicus Thomisticus* and *Cursus Theologicus Thomisticus*.

II. JESUITS.—PETER FONSECA (1528–99), called the “Portuguese Aristotle,” was the first professor of philosophy in the newly founded Jesuit College of Coimbra. He is the originator of the theory of the *scientia media*, which his pupil Molina did most to develop. His principal work is a commentary on Aristotle’s *Metaphysics*. The CONIMBRICENSES are a group of Jesuits (Goes, Magalhaens, Bartholomew Alvarez, Couto) who published the commentaries on Aristotle which formed part of the philosophical course in the Jesuit College in Coimbra, under the title “*Commentarii Collegii Conimbricensis S. J.*,” from 1582 to 1606. This work is an ideological commentary on Aristotle. Their study of the sources of Scholasticism shows the return of true philosophical thought and scientific spirit. COSMAS ALAMANNI (1559–1634) arranged the philosophy of St. Thomas in systematic order under the title *Summa Philosophiæ Divi Thomæ Aquinatis*. In connection with the restoration of Scholasticism this work was accorded high praise by Pope Leo XIII. SILVESTER MAURUS (1619–87) of Spoleto taught philosophy and theology for many years in the Roman College. His writings constitute a complete course in Scholastic philosophy in the form of a commentary on Aristotle. He is ranked as one of the foremost expounders of Scholasticism.

FRANCIS SUAREZ (1548–1617),¹ a member of an

¹ MAHIEU, François Suarez. *Sa philosophie et les rapports qu’elle a avec sa théologie* (Paris, 1921); *L’éclecticisme Suarézien* in *Revue Thomiste*, May-June, 1925, pp. 250-85.

ancient family in Granada, taught in most of the celebrated Jesuit institutions of learning, especially in the Roman College. He is considered the greatest theologian among the Jesuit scholars. He discusses philosophical questions in many of his theological writings, and has two important and extensive philosophical treatises, *Disputationes Metaphysicæ* and *De Legibus*. Suarez is clear and explicit in exposition, and makes a careful study of all important authors who have written on the questions he treats. Some of his theses are a return to pre-Thomist philosophy. Among these are the logical distinction between essence and existence, and the capacity of prime matter to exist without a form. He shares the view of Scotus that only the metaphysical proofs for the existence of God have apodictic value. He appears to ascribe independent existence to the ideal essences of things in his theory of the objective truth of the future conditionals. In his treatise on laws, Suarez teaches among other doctrines that the consent of the governed is the source of civil authority, and that citizens have the right under certain conditions to depose the civil ruler. Suarez not infrequently replaces the metaphysical proofs of St. Thomas by others founded on principles of more limited application and extension and by arguments drawn from experience. In this he is under the influence of the empiric tendencies of his age. The influence of Suarez was far-reaching, not only because of his clear and simple exposition of metaphysics, but also because he abandoned the old Aristotelean order of the subject matter in favor of that which is now in common use, and proposed a form of eclecticism which made a wide appeal.

The Spanish revival of Scholasticism did not achieve the results it deserved, because it was not in contact with the problems which occupied the minds of European scholars in general during this time.

236. Occamists.—Although there were no men of eminence among the Occamists, they maintained their position at the universities. The most notable among them is GABRIEL BIEL (1425–95), a native of Speyer. Biel studied in Heidelberg and Erfurt. After having filled various ecclesiastical positions, he was appointed the first professor of theology in the newly erected University of Tübingen in 1484. Biel is an avowed nominalist. In the preface to his *Commentary on the Sentences*, he declares himself a follower of Occam. He possesses a vast erudition. All the great Schoolmen and the principal writers of the period of decadence are quoted in his *Commentary*. Yet, his thoroughgoing nominalism imparts a close unity to his treatise. His clearness, order, and precision make him the most appealing writer of the nominalist school. His good sense prevented him from accepting the daring and bizarre conclusions of the rank and file of the nominalist school. Biel has been miscalled the “last of the Schoolmen,” for he represents a decadent form of Scholasticism. Likewise he has been mistermned the forerunner of the so-called Reformation. His high and unfailing regard for the Church, its head, and its doctrines puts him into formal opposition with Luther. Biel’s works possess a great historical value, because they show the actual teachings of German theology some twenty years before the apostasy of Luther. Biel’s treatise *De Potestate et*

Utilitate Monetarum is important for his teachings on economics.

237. Retrospect.—The rise and progress of the sciences, which took place during this period of medieval philosophy, made many of the old scientific doctrines untenable, such as the geocentric astronomy, the solid heavens, the nature of heavenly bodies, the Empedoclean elements, the natural place of the elements, etc. In general, the Schoolmen defended all of these antiquated views and rejected all the discoveries of experimental science. Unfortunately, there is abundant proof of this. Scholasticism would not have suffered its complete and humiliating downfall if the Schoolmen had given up every untenable theory and accepted every established fact from whatever source it came, and if they had built up their philosophical system on the data of psychology and the principles of metaphysics, which were not affected by the abandonment of the old untenable theories nor by the new discoveries of science. Such was the enlightened attitude of St. Thomas in the thirteenth century. But now the vanguard of the new sciences rejected Scholasticism, so little known and so poorly defended.

Part IV

MODERN PHILOSOPHY¹

Section I

THE ENLIGHTENMENT (1600-1800)

CHAPTER I

INTRODUCTION

238. Characteristics. — The Enlightenment is a rationalistic period in philosophy, which considered the Christian Faith as ignorance and obscurantism, and endeavored to “emancipate” human reason from the “shackles” of supernatural revelation. In the period of the Enlightenment empiricism and the mathematical theory converge in developing the method of natural science, but maintain independent attitudes in philosophy. The program of the empiric method was laid down by Bacon, but his method

¹ General literature: ÜBERWEG, *Grundriss*, Vols. III and IV, 11th ed. by FRISCHEISEN-KÖHLER (1915). WINDELBAND, *Geschichte der neueren Philosophie*, 5th ed. (1911). KUNO FISCHER, *Geschichte der neueren Philosophie* (1897). WILLMANN, *Geschichte des Idealismus*, Vol. III (1907). ADAMSON, *Development of Modern Philosophy* (1908). FORSYTH, *English Philosophy* (1910). STEPHEN, *The English Utilitarians* (1900). KLIMKE, *Institutiones Historiæ Philosophiæ*, 2 Vols. (1923).

was unsuccessful. The mathematical method was laid down by Descartes, and the systems of Spinoza and Leibniz are the issue of this development.

The development of theoretical philosophy had a powerful influence on practical philosophy, principally on the philosophy of right. The ethical naturalism of Hobbes is the application of the principles of Bacon and Descartes.

EMPIRICISM is the philosophy which restricts the method of philosophical research to experience and to the combination of the facts of experience, and the field of philosophy to the objects which can be known by this method. DOGMATISM, as understood by the empiric school, is the philosophy which asserts that thought is able to transcend the field of experience, to know the "absolute," and to base other philosophical knowledge on this knowledge. RATIONALISM, as understood by the same school, regards reason as the source of all knowledge; it is opposed to empiricism, which derives all knowledge from experience.

The basis of the Enlightenment is the secular view of life worked out by the Renaissance. The philosophy of the Enlightenment had its beginning in England, whence it was transplanted to France. Here its ideals were developed and turned their destructive energy against Church and State. Germany received the ideas of the Enlightenment at first from France and then directly from England. In Germany they worked out rather in poetry than in philosophy.

The metaphysics of Descartes, with its dualism of conscious and corporeal substances, is one of the

controlling doctrines of this period, because the problem of knowledge controls the theoretical philosophy of the Enlightenment.

The Enlightenment's return to nature and the individual's revelling in his inner life were caused by the recrudescence of the exaggerated individualism of the Renaissance. Happiness, morality, society, and the State became the main problems of the philosophy of the Enlightenment, because the individual was the all-important problem. The fundamental error in the Enlightenment's theory of ethics is the view that morality is foreign to the nature of the individual. Ethics was so extensively studied in this period, because it not only seemed foreign to the individual, but also because, once this principle was accepted, the question arose as to the motives from which man obeys ethical commands, and on what grounds these commands are valid. Thus it came about that the ethics of this period studied especially the criterion, the sanction, and the motive of morality. The ethics of this period was utilitarian, because happiness, the highest good, was asserted to consist in the satisfaction of the natural impulses of the individual. Out of this question arose the further question of the value for happiness of the State and public institutions, and their historical development. The philosophy of the Enlightenment was directed against positive religion.

239. Leaders.—JOHN LOCKE became the leader of the English Enlightenment by finding a popular form of exposition for the general outlines of the Cartesian conception of the world. BERKELEY was the aftermath of the metaphysical tendency of this

system. Finally, DAVID HUME, the deepest of the English thinkers, developed empiricism into positivism.

The leaders of the French Enlightenment were BAYLE, whose *Dictionnaire* turned the attention of the general public toward religious scepticism; VOLTAIRE, who gave the most eloquent and emphatic expression to the ideals of the Enlightenment; and CONDILLAC, the positivist culmination of the movement.

WOLFF and LEIBNIZ, the philosophers, and HERDER and LESSING, the poets, were the leaders of the Enlightenment in Germany. The German Enlightenment prepared the way for German philosophy, because, by remaining in contact with the teeming ideas of the new literature, it prevented the self-disintegration which terminated the movement in England, and the submersion in practical life, which put an end to the movement in France.

CHAPTER II

RATIONALISM

240. René Descartes (1596-1650).—**LIFE.**—A native of La Haye, Descartes was educated by the Jesuits at La Flèche. At the age of sixteen, he went to Paris, where he made an aimless study of philosophy, theology, physics, and mathematics. From 1617 until 1621 he served as a volunteer in the armies of Maurice of Nassau and Tilly. After several years of travel he lived in retirement in various parts of Holland, and devoted himself entirely to his studies. In 1649 Queen Christine invited him to her capital to draw up a code for her proposed academy of sciences and to be her tutor in philosophy, but he soon succumbed to the unaccustomed climate. Descartes' principal writings are the *Discours de la Méthode*; *Meditationes de Prima Philosophia*; *Principia Philosophica*; *Les Passions de l'Âme*.

241. METHODOLOGY.—Descartes' methodology is the most important part of his philosophy. Its purpose is to show why everything is to be doubted, and how this doubt is to be overcome.

(1) *Foundation of the Cartesian Doubt.*—All our knowledge is derived either from sense perception or from reason. Now the senses often deceive us, and accordingly we cannot trust them; furthermore, we

cannot depend unconditionally even upon reason, for it is conceivable that reason is of such a nature that even its right use leads us into error. Seeing that the only two sources of our knowledge are in this way untrustworthy, there is no course open to us but to question everything which has hitherto been accepted as certain. Therefore, *de omnibus dubitandum est*.

(2) *Overcoming this Doubt*.—(a) Doubt, the reality of which cannot be doubted, presupposes a doubting or thinking subject: *cogito, ergo sum*. Therefore, the existence of the doubting ego is absolutely certain. (b) This proposition is true, because it is clear and evident. Therefore, evidence (that is, a clear and distinct idea) is the infallible criterion of truth. (c) By the aid of this criterion we acquire knowledge of a second fundamental truth, the existence of God. (d) For, as finite beings, we cannot of ourselves form the concept of an infinite being. (e) The concept of God includes existence: ontological proof of the existence of God. (f) God's essential attributes of holiness and truthfulness exclude the possibility that He constituted our intellect incapable of knowing the truth. (g) Therefore, whatever is apprehended clearly and distinctly is true.

(3) *Critique of Descartes' Methodology*.—(a) If we doubt everything, we cannot overcome doubt. Every attempt to overcome doubt must presuppose the fact that the human intellect is essentially capable of true knowledge. (b) Descartes' argumentation is a vicious circle, because he proves the veracity of the human intellect from the veracity of God and vice versa. (c) Descartes' proofs for the exist-

ence of God are not valid. The first proof overlooks the fact that our concept of God is finite. The second proof infers the existence of God from the concept of God. (d) The fundamental importance of Descartes' methodology for modern philosophy lies in his subjectivistic proof of the existence of certitude, undertaken from the individualistic point of view, and in the introduction of the mathematical method into philosophy. The philosophy of Spinoza and the modern science of physics were profoundly influenced by the mathematical method. Individualistic idealism and the mathematical method dominate the world-view of Descartes.

242. METAPHYSICS. — (1) *Cosmology.* — Descartes regards the external world from the mathematical point of view, and considers extension as the nature of bodies. The secondary qualities of bodies are only states of the subject which perceives them. Matter has no principle of activity in it beyond the motion which it received from God in the beginning. This is the mechanical explanation of nature. The first law of nature is that the totality of motion is always the same. Every body continues in the state in which it is. If a body is moved, it maintains the direction in which it is set in motion, and moves in a straight line in so far as it is not affected by external causes. If a body which has been set in motion strikes another body, a transference of motion takes place.

(2) *Psychology.* — Descartes considers the psychic world from the point of view of pure activity. Pure activity is the essence of spirit. From this definition it follows that willing is a mode of thought. These statements are incompatible with Descartes' doc-

trine of the primacy of the will in God: a thing is so, because God wills it; similarly a thing is good, because God wills it. Everything, even the eternal verities, depend upon the will of God, and therefore His will cannot be conditioned by His intellect. Descartes' doctrines of the nature of spirit (namely, that will is merely a mode of thought) is irreconcilable also with his declaration that every judgment is an act of the will, for this is possible only if willing is specifically different from knowing.

Since there is no mean between spirit and inanimate body, all phenomena of vegetal and of sense life require a mechanical explanation. Organic bodies are mere machines. The vital principle is the blood, in the circulation of which life consists, and the stoppage of which is death.

Matter and spirit being diametrically opposed substances, their natural union and interaction in man is impossible. The union of soul and body is the union of two substances, each complete in itself. It is not a union of two components into one nature. Nevertheless, Descartes terms the soul the substantial form of the body. The soul is united with the body through the pineal gland. Through this gland the soul acts upon the blood, and through the blood upon the body. This interaction is merely a *causalitas occasionalis*, resulting in the states which take place in the two substances, body and soul. The ideas in the soul are innate, because the body is incapable of acting efficiently upon the soul.

(3) *Ontology*.—Whatever exists is either extension or thought. All else is a mode of these substances. In the strict sense, God is the only substance, for God alone can be thought apart from all

else: "By substance we conceive nothing else than a thing which exists in such a way as to stand in need of nothing beyond itself with a view to its existence."

243. Occasionalism and Ontologism are developments of the philosophy of Descartes, which was unable to determine the relation of soul and body according to its criterion of evidence. From Descartes' concept of extension as the nature of bodies, ARNOLD GEULINX (1625-69) concluded that, since extension does not imply activity, God is the cause of the apparent interaction of bodies. From Descartes' definition of substance he further concluded that God is the only substance, and that created bodies and spirits are merely modes of God's mind.

NICHOLAS MALEBRANCHE (1638-1715) solved the same difficulty in another way. If extension, or body, does not act on spirit, the concept of extension in our minds cannot be derived from the objects about us. Extension is merely an idea in the divine intellect. We know the ideas by a participation of the divine intellect, in which all created spirits exist as bodies exist in space.

Occasionalism and ontologism are the direct road from Descartes to Spinoza's pantheism and the destruction of ethical action. For, if we cannot act, we are not responsible beings.

244. Baruch de Spinoza (1632-77). — **LIFE.** — Spinoza was born in Amsterdam, his parents being Jewish emigrants from Portugal. His break with Jewish orthodoxy occurred early in his life, and he was eventually expelled from the synagogue. He lived in various cities of Holland, maintaining a frugal independence by grinding lenses for optical

instruments. Owing to the state of his health, he refused a professorship of philosophy in the University of Heidelberg in 1673. His principal writings are *Renati Descartes Principia Philosophiæ*; *Tractatus Politico-Theologicus*; *Ethica More Geometrico Demonstrata*.

Spinoza's point of departure is found in Descartes' categories of extension and mind, from which he derived by the mathematical method a system of naturalistic pantheism. Spinoza regards the entire universe as one infinite and universal substance, of which extension and mind are but attributes, and of which individual things are modes or changing forms. Besides this world of ephemeral existences in the two modes of thought and extension, there is a world of eternal essences, a world of unchanging values, by attachment to which the soul of man may win spiritual freedom and eternal life.

245. THEORETICAL PHILOSOPHY. — (1) *Substantia est id quod per se est et per se concipitur.*¹ God is the only substance. The concept of substance includes existence, unicity, and infinite perfection. (2) Substance consists of an infinite number of attributes, of which we know only extension and thought. (3) Each attribute consists of an infinite number of modes, or individual phenomena. The modes of extension are bodies; the modes of thought are spirits. (4) Each mode is so determined by another mode of the same attribute as to follow from it by mathematical necessity. This is becoming in time *sub specie æternitatis*. (5) Each mode of ex-

¹ "Substance is that which exists of itself and is conceived of itself."

tension has its corresponding mode of thought, or idea (animism). However, these two kinds of modes do not interact; for each attribute is independent of the other, but agrees with it perfectly, because of the identity of substance. (6) The mathematical necessity with which every state of the universe follows from a prior one, excludes the possibility of chance, finality, free will, and miracles.

246. PRACTICAL PHILOSOPHY.—(1) If we know all things as they are in God and necessarily follow from His nature, our knowledge is adequate, and our will is free from emotions and passions. This perfect knowledge of God is identical with the intellectual love of God, and constitutes the last end of all ethical endeavor. It is the duty of man to strive for this end, not because it is intrinsically good—there is no objective distinction between good and evil—but because it is for him the source of greatest perfection and power. Virtue, knowledge, and power are identical.

(2) There is no intrinsic distinction between right and wrong, founded on the nature of man or on the will of God. Might is right. In the state of nature every one has as much right as he has might. In constituting society, man in his own interest gives over this right to the State, which therefore is founded on a contract. The oligarchic republic is the best form of the State. The State has unlimited power over its citizens, excepting the freedom of thought and the freedom of the press. The State has complete control over religious worship. International treaties are binding on a State only so long as it considers them advantageous.

(3) The intellectual love of God is the essence of

true religion, which is therefore the religion of reason. The religions which have appeared in the course of history must be evaluated only according to their moral values. Their founders merely intended to educate men to obey God and to love their fellow-men. Like all other phenomena of literature, religious books, including the Bible, must be historically explained as to their theoretical import; that is, they must be understood from the point of view of the intellectual condition of their authors. Spinoza's theory of historical criticism destroys the binding and normative character of revelation.

247. CRITICAL NOTE.—(1) Spinoza's attempt to deduce the universe and all cosmic becoming from a single basic concept by means of the mathematical method is a failure, because he does not make the transition from substance to attributes, and from attributes to modes *more geometrico*: he postulates it. (2) The initial error of Spinoza's metaphysics (which he terms ethics), vitiating his whole philosophy, is his attempt to explain all things (God, man, and the world) by means of purely *a priori* concepts and without reference to the data of experience. The personification of substance in the very beginning of his system is a striking example of this error in method. (3) Every thesis of Spinoza's ethics contradicts experience. His doctrine about substance contradicts it, because our own consciousness and the data of sense-experience afford evidence of a mean between the self-existent being (or substance in the sense of Spinoza) and the modes (again in the sense of Spinoza)—namely, finite *substances*, material and spiritual. His doctrine of attributes contradicts experience, because the parallel-

ism which he maintains is non-existent, and because ethical and physical laws are utterly disparate. His doctrine of the modes contradicts experience, because apart from mechanics the doctrine of mechanically necessary becoming is foreign to science.

Considered as a whole, the philosophy of Spinoza is one of the most abnormal and self-contradictory products of human thought. Spinoza attempted to reconcile the antithesis of theism and atheism, of idealism and materialism, of rationalism and mysticism; but the sequel shows that the impulse he gave to philosophical thought moved in the direction of naturalism, eliminating God and spirit from the realm of philosophy.

248. Gottfried Wilhelm von Leibniz (LEIBNITZ) (1646–1716).—LIFE.—Leibniz studied law in Leipzig, his native city, Jena and Altdorf. He received the degree of doctor of laws at the age of eighteen years. He entered the diplomatic service, which took him to Paris (1672–76), Vienna, and Rome (1687–90). In 1691 he accepted the post of librarian to the Catholic Duke Anton Ulrich in Wolfenbüttel. In 1700 he founded the Prussian Academy of Sciences. In 1711 he suggested the founding of a similar academy to Peter the Great, a project which was not immediately carried out. He made similar proposals at the courts of Dresden and Vienna. Leibniz was a universal genius, who advanced whatever he took in hand. His philosophy is not laid down in systematic treatises, but must be sought in his letters and in the periodicals to which he contributed. His principal writings are *Vom menschlichen Wissen*; *Nouveaux Essais sur l'Entendement Humain*; *Théodicée*; *De Primæ Philosophiæ Emendatione*;

Système Nouveau de la Nature; La Monadologie. During the last twenty years of his life, Leibniz ceased to attend Protestant worship. He had some Catholic leanings, but remained a deistic rationalist.

249. PSYCHOLOGICAL VIEW OF THE WORLD.—The difficulty in the Cartesian dualism is the point of departure in the philosophy of Leibniz. Spinoza had endeavored to overcome this difficulty by his theory of the unicity of substance, but he had retained the plurality of extension and thought as attributes of substance. Leibniz, on the contrary, retains the plurality of substances, but seeks to overcome the dualism of extension and spirit by his new definition of substance.

Leibniz's idea of the universe is an enlargement of his idea of the soul. Whatever exists is animated; it is a soul, or monad. The monads are non-spatial, self-acting forces, or immaterial units, each one representing the same universe, but representing it from a different point of view, and each attaining its activity through the will of God, who is the supreme and perfect monad. All monads are created by God, and are imperishable. Birth and death are merely the development or envelopment of monads. The world is the resultant of different orders of monads, infinite in number. Each monad in a greater or lesser degree possesses the power of reflecting in itself the universe. All monads have two activities, perception and appetition. Above the physical elements with their chemical affinities and the plants and animals with their dream-like or sentient life, rise the monads which through development have obtained the power of thought, and are therefore human souls. Leibniz overcomes Des-

cartes' dualism of extension and thought by ascribing a psychic nature and activity to every substance without exception, and then declaring extension as an illusion. The lower monads have obscure, vague, and unconscious perceptions; the higher monads have clear, distinct, and conscious perceptions (apperceptions).

The following conclusions follow from this doctrine: (1) There are no bodies. Matter consists of a group of lower monads. Space and time are merely phenomena of consciousness. (2) Each monad is an independent force, and in this respect a substance. Substance and cause are correlatives. (3) Organisms are groups of monads. They are distinguished from inanimate matter in that they have a central monad, which dominates the lower monads.

250. METAPHYSICS OF CAUSALITY.—Substance is force, and activity is self-realization. Causality is the process of the parallel self-realization of the monads. Since the monads are, on the one hand, essentially active, and since, on the other hand, interaction between them is impossible, each monad produces all its perceptions automatically within itself. The application of this principle to the human soul leads to the assertion that all ideas are virtually innate; that is, the soul has the power and disposition to form them, and in the process of thought draws them from its own innate groundwork and activity.

Pre-established Harmony.—The will of God is the ultimate reason of the self-contained and entirely self-determined development of each monad and of its power of reflecting within itself every other

monad in its conscious or unconscious cognition. God created only those monads, the several states of whose self-activity He foreknew as constituting parallel series. This principle not only explains causality in general, but also the interaction between body and soul.

Mechanism and Teleology.—Viewing the relations of the monads to each other in the light of our external sense experience, we have the perception of a purely phenomenal world of bodies bound up with each other by mechanical causality. Thus, Leibniz agrees with Descartes in the mechanical explanation of the physical aspect of the world. But he explains the succession of psychic activities as a divinely constituted teleological series. This attempt to reconcile mechanism and teleology is a failure, because, if matter is merely a subjective phenomenon, mechanical causality has no objective basis.

Change.—God created the monads. The world thus having been produced, no monad becomes or ceases. What is apparently becoming and desition, is in reality the evolution or devolution of monads.

251. THEOLOGICAL VIEW OF THE WORLD.—On the basis of the pre-established harmony, Leibniz proves the existence of God by the ontological, the teleological, and the metaphysical argument. Since God exists, human existence can be estimated correctly only from the theological standpoint. The principle of the primacy of the intellect—God is the supreme and perfect monad—dominates Leibniz's conception of God and His activity. Moral necessity compels God always to will what is best (intellectual determinism) and to create the most perfect world (optimism). In virtue of the same principle, the

human will also is necessitated to choose what is best. Leibniz further distinguishes metaphysical, physical, and moral evil. Metaphysical evil consists in the limitation of the creature, and is therefore given with its nature. Physical evil is a necessary consequence of metaphysical evil. Leibniz's theory of moral evil is not clear. Its possibility is given with human liberty; yet, he says that man always necessarily chooses what is best.

252. CRITICAL NOTE.—A high tone of moral earnestness pervades the philosophy of Leibniz; but, as his theories are based on arbitrary definitions and principles, they are a visionary system of thought. True philosophy must derive its axioms from the reality it undertakes to explain. Leibniz's monadology (the central doctrine of his philosophy) is a fiction. His theory of causality is hopelessly at variance with the data of experience. The hypothesis of a pre-established harmony is an artificial expedient necessitated by the monadology. Intellectual determinism is incompatible with the nature of God and the nature of man. If Spinoza's doctrine may be described as extreme universalism, Leibniz's philosophy may be regarded as extreme individualism. Leibniz's theory of knowledge dimly foreshadows the Kantian doctrine of the *a priori* elements of cognition. His conception of nature as instinct with life, and his emphasis of the idea of force as the abiding principle of matter and motion, prepared the formulation of the law of the conservation and indestructibility of energy, which has become the leading idea of modern physics. Above all, Leibniz was an implacable foe of pantheism and materialism.

CHAPTER III

EMPIRICISM

253. General Characteristics.—Unlike the rationalists of this period, whose doctrines have been sketched above, the empiricist philosophers of the seventeenth and eighteenth centuries did not formulate new or complete systems of philosophy. Their work is limited to monographs on the origin and value of our cognitional processes and their products.

The theoretical philosophy of empiricism is limited almost entirely to epistemology. It is based on the principle that truth is found only in sense-cognition—that is, in experience. Scepticism and materialism are the culmination of this philosophy. The empiricists also adopted a definite attitude toward the problems of practical life, namely, toward religion and ethics. The practical philosophy of empiricism is called naturalism, because it admits only a natural origin and explanation of religion, morality, and society.

Francis Bacon, Hobbes, Locke, Berkeley, Hume, Reid, and Condillac are the leaders of the empiricist movement.

254. Francis Bacon (1561–1626).—**LIFE.**—Born in London, Bacon received his education at Trinity College, Cambridge. In 1576 he became a barrister at Gray's Inn. In 1583 and again in 1591 he was a

Member of Parliament. In 1604 he became legal counsel to the Crown, in 1618 Lord Chancellor and Baron of Verulam, and in 1621 Viscount of St. Albans. In 1621 he was sentenced to pay a fine of £40,000 for accepting a bribe, and was deprived of his office. The fine was remitted by the king, but Bacon spent the rest of his life in retirement. His principal philosophical writings are the *Novum Organum* and *De Dignitate et Augmentis Scientiarum*.

PHILOSOPHY.—Bacon set himself the ambitious task of reorganizing the sciences. Philosophy is at a standstill, he says, because of the distempers of learning. These diseases are the luxury of style (in which the manner is considered more than the matter), the pursuit of fanciful speculation, and the disregard of truth (consisting in imposture and credulity). The subjection of science to the inventive spirit and the liberation of truth from all chance are the tasks which confront men. In order to understand the world and make it serve us, we must form an acquaintance with it. This acquaintance consists in experience, which is therefore the beginning of science. To attain a correct knowledge of nature, the mind must be purified of all preconceptions and then proceed by observation and induction.

The mind must be freed: (1) from the idols of the tribe, which are errors inherent in human nature; (2) from the idols of the den, which are peculiar to the individual; (3) from the idols of the market, which are due to fallacious use of language; (4) from the idols of the theater, which are false tenets of philosophy and perverted rules of demonstration. In order to rid the mind of these idols or prejudices,

science must begin with doubt. To clear away this doubt, we must go to nature and build up the structure of our knowledge from outward experience. Scientific knowledge is guided by the process of induction, which is generalization by abstraction. Bacon aims at a knowledge of the form or nature of things, which is acquired by setting aside whatever is non-essential. The whole physical world consists of a limited number of simple elements variously combined, so that all that is required to obtain a complete knowledge of all concrete objects in nature is simply, by a process of exclusion, to reach the simple elements of an object. Induction is the method of science, and natural science is the parent of all the sciences.

255. CRITICAL NOTE.—Bacon has the great and enduring merit of having recognized the necessity and importance of induction for science, and of having opposed to a degeneration of Scholasticism a new ideal of science. He was the first to formulate consciously the principle of the inductive methods. However, his methods, as he proposed them in detail, are useless; and the rise and progress of the inductive sciences took place quite independently of Bacon and his methods. For, long before Bacon's time, Nicholas of Cusa (1401–64) had done remarkable work in historical criticism; Copernicus (1473–1543) had formulated the heliocentric system of astronomy and discovered the elliptic orbits of the planets; Tycho de Brahe (1546–1601) had made a correct chart of 1005 stars without the aid of a telescope; Kepler (1571–1630) had found the laws of planetary motion, which Bacon persistently rejected; Harvey had taught the circulation of the blood as early as

1619; and finally Newton's (1643-1727) and Galileo's (1564-1642) researches followed different lines from those indicated by Bacon, whose *Novum Organum* was published in 1620. Moreover, such a mechanical and formal process of classification and abstraction as Bacon proposed was not fitted to cope with the deeper problems of thought. Of the nature and origin of things Bacon has nothing to say. The Baconian philosophy from its very nature is incapable of explaining religion. Neither could it comprehend the essential nature of the human mind. Of an ethical theory Bacon has given us only hints and suggestions; on politics he has little to say; and with regard to religion he is altogether silent.

256. Thomas Hobbes (1588-1679). — **LIFE.** — The son of a clergyman, Hobbes was educated at Magdalen Hall, Oxford. He was tutor to the Earl of Devonshire, to his son, and still later to Charles II. He was a friend of Francis Bacon, and during his travels on the continent he met Descartes, Gassendi, and Galileo, who all influenced his philosophical thought. His absolutistic theories of the State were probably influenced also by the political conditions in England. His philosophical writings are: *Elementorum Philosophiæ. Sectio I: de Corpore; II: de Homine; III: de Cive; De Natura Humana et Corpore politico; Leviathan sive de Materia, Forma, et Potestate Civitatis Ecclesiasticæ et Civilis; Quæstiones de Libertate, Necessitate, et Casu.*

257. THEORY OF KNOWLEDGE. — Hobbes defines philosophy as the reasoned knowledge of effects from causes and of causes from effects. Since motion is the principle of all things, philosophy is the science of motion. All things, including the prob-

lems of psychology and sociology, are to be mechanically explained. Consciousness is the feeling in the brain of motions in the nervous system. All conscious life consists of nerve motions, which are combined in various ways. Our sensations are wholly subjective. Thus, Hobbes is a nominalist in logic, and a materialist and associationist in psychology.

258. ETHICS.—In ethics, which is the principal part of his philosophy, Hobbes regards man as naturally unmoral. Consequently, he founds morality on the authority of the State, and recommends the absolute monarchy as the best form of government. As in the natural world, he goes on to explain, so in the world of mankind motion and antagonism are the original conditions (*bellum omnium contra omnes*). The State is an aggregation of bodies, just as matter is a combination of particles. Self-aggrandizement is the motive of human actions (*homo homini lupus*). In order to protect themselves from one another, men constituted the State. Enlightened self-interest led the individual to see that it is vastly preferable for him to give up the abstract right to everything which he is strong enough to wrest from others and keep, and to refrain from aggression upon the liberty and the possessions of others, provided he is thus certain of securing a like immunity for himself. This is possible on two conditions: all men alike must enter into this compact to respect one another's rights, and the carrying out of the compact must be guaranteed by the creation of a single power strong enough to enforce its demands on individuals by force of physical compulsion.

Thus, right, duty, and morality are the creations of the State. Hence, a man can have no private morality which conflicts with the ordinances of the State. Rights of conscience are impertinences. The only true religion is the worship sanctioned by the State. Religion is the child of fear, and duty the offspring of self-interest. Both are the creatures of law, the artificial appointments of political expediency. The king can do no wrong, for the State is the contract of all the people with one another. The ruler is not a party to the covenant, and therefore he cannot break it. The recall of the delegated power would mean that society no longer exists, that no one remains to settle disputes, and that the original anarchy has returned. Any conceivable act of despotism on the part of the ruler is preferable to this. Hobbes rejects all ecclesiastical authority.

259. HISTORICAL POSITION.—Hobbes took up the spiritual heritage of Bacon by carrying the physical postulates of the *Organum* to their legitimate conclusions in the spheres of ethics and religion, though his intellectual vigor and independence of thought are all his own. The Civil War in England turned his attention to political matters. His *Leviathan* was specially directed against Cromwell, who had overthrown the monarchy of England. Hobbes preceded Rousseau in declaring the social contract to be the foundation of the State. Hobbes conceives men as making the contract for mutual safety; Rousseau regards them as constituting the State for mutual advantage and development. With Hobbes the State is an absolute monarchy; according to Rousseau, it is a democracy. Hobbes finds in the natural state of man only fear and selfishness; Rous-

seau sees in nature the source of all morality and religion. With Hobbes the social contract is based on the idea that might is right; with Rousseau it unites all men in the enjoyment of equal rights and duties.¹ Both Hobbes and Rousseau are extremists in their theories of the origin of the State, for the State abstractly considered has its origin in human nature itself. Only in the State can man attain his natural physical, intellectual, moral, and religious perfection. Furthermore, Hobbes is guilty of a most grave error in declaring that man is naturally unmoral; for man has natural appetites, natural duties, and natural ends. There is an intrinsic distinction between moral good and moral evil. The power of the State is also limited by its purpose, which is the furtherance of man's natural welfare in regard to those things which cannot be attained by the activities of the family alone. Religion also is a natural duty of man. For, once it is proved that God exists, then it is our clear duty to acknowledge Him and to offer Him the special homage due to His position and greatness. The Church instituted by God is a perfect society by her nature and purpose. From all this it appears that the political philosophy of Hobbes is a complete perversion of the moral order. In drawing attention to the physiological side of the cognitional processes, Hobbes failed to recognize the disparate character of the mind as compared with physical being and with the laws of mechanics.

260. John Locke (1632-1704).—LIFE.—Locke was educated at Christ Church, Oxford, where he then

¹ ALEXANDER, *Short History of Philosophy* (Glasgow, 1908), p. 195.

taught Greek, rhetoric, and philosophy for some time from 1660. In 1666 he became secretary to Lord Ashley, after whose fall he resided in France and Holland from 1675 until 1689. He returned to England under William of Orange, and was appointed commissioner of appeals. In 1700 he resigned his commission on the Board of Trade. Locke's principal philosophical work is the *Essay Concerning Human Understanding*.

261. PHILOSOPHY.—Locke is the classical representative of empiricism. His *Essay* is an inquiry “into the origin, extent, and certainty of human knowledge, together with the grounds and degrees of belief, opinion, and assent.” The following are the main features of this work:

(1) *The human mind does not possess innate ideas.* The universal admission and original possession of certain propositions are commonly adduced as proofs that these ideas are innate. Locke disproves this assertion by appealing to the experience of children and to various races, which do not possess these ideas. Consequently, he denies the existence of innate ideas both in the speculative and in the practical domain.

(2) *Internal and external experience (that is, sensation and reflection) is the only source of knowledge.* When the condition of an object resembles the idea which it causes, it is a primary quality of the object; for example, extension and impenetrability are primary qualities. But when the idea represents a relation of the object to our sense organs (for example, color or sound), the idea is subjective. In forming simple ideas the mind is passive, but

complex ideas are the product of the mind. Hence, there is a reality corresponding to simple ideas, but nothing real corresponds to complex ideas.

(3) *Classification of Ideas.*—Simple ideas are those which come to us through experience. They are divided into four classes: those which come to us through one sense; those which come to us through more than one sense; those which come through reflection only (e.g., perception, belief, doubt, and volition); and those which are derived from sensation and reflection together (e.g., pleasure, pain, power, existence, unity, and succession). Complex ideas are those which the mind forms by combining simple ideas derived from experience. Complex ideas are classified as substances, modes, and relations. Substances are combinations of simple ideas, which are taken to represent distinct particular things as subsisting in themselves. Neither internal nor external experience gives us the idea of substance, but we are compelled to supply a support for the aggregations of qualities given in our experience. All our ideas of substance are but “collections of simple ideas with the supposition of something to which they belong or in which they subsist.” The modes are complex ideas considered as affections of substances (e.g., triangle, gratitude, murder). Relations are complex ideas so constituted that the one calls up the other (e.g., cause and effect, identity and diversity).

Since substance is unknowable, we cannot divide substances according to their nature, but only according to their qualities; and thus we divide them into cogitative and non-cogitative substances. Cogitative substances must not be called immaterial, for

their passivity makes it probable that they are material.

(4) *Validity of our Concepts*.—Of the existence of God we have demonstrative knowledge both from the design in the outer world, and still more by our own existence and our powers, which demand a supremely powerful and intelligent being as their Creator. We have an intuitive knowledge of our own existence. We have knowledge of material things through our sensations, for they are caused by exterior causes, and there is a manifest difference between ideas from sensation and ideas from memory.

(5) *Ethics*.—Locke did not formulate a system of ethics, but scattered references in his writings show what lines it would have followed. Good and evil, he says, are nothing but pleasure and pain. The will and law of God is the true ground of morality. Moral good is the conformity of our voluntary actions to some law, whereby good is drawn on us from the will and power of the lawmaker—that is, ultimately from God. Our will is determined by our desire for happiness. Free will consists in the power of suspending any particular desire.

The State is a contract concluded for the security of property. The parties renounce the right of appropriating everything and of punishing him who lays hands on their property, and submit themselves to the community, which gives expression to its will by the majority. The government has three powers: the legislative, the executive (that is, administrative and judicial), and the federative. The legislative power is the supreme power in the State, and in all cases of dispute the decision must rest with the

people. The people are not bound to submit to the arbitrary rule of a tyrant.

(6) *Religion*.—The Church is a free communion of those who seek the good of their souls in a common worship of God. The State should tolerate all churches whose doctrines do not endanger its well-being. Without revelation it would have been very difficult even for those with the highest intellectual gifts, and utterly impossible for those less gifted, to convince themselves of the truth of moral principles. Without revelation we would have lacked one of the strongest impulses to moral life—the hope of reward and the fear of punishment. Locke does not deny miracles; their purpose is to convince us of the truth of divine revelation.

262. HISTORICAL POSITION.—Locke opened the discussion of the epistemological problem, which has occupied the central position in non-Scholastic philosophy since his time. He opposed Descartes on the question of the origin of ideas. But the ideas of Locke are sensations, and he failed to see the specific distinction between idea and sensation. Though he made use himself of analytical principles and “complex ideas” to prove the existence of God, elsewhere he denied their truth. His solution of the epistemological problem is an appeal to the perfection of God, rather than a philosophical solution. He denied the spirituality of the soul by asserting that matter is “cogitative.” Though fragmentary and false in principle, Locke’s ethical doctrines contain appealing ideas. His views on education gained a wide appeal when Rousseau appeared as their advocate. Montesquieu gave currency to his political theories. Locke agrees with

Hobbes in his theory of the origin of the State, but denies that primitive man was unethical. Rousseau took up and modified Locke's theory of the social contract. Locke's theory of moral good and evil is voluntaristic and utilitarian: actions are good because God commands them, and because they give us pleasure. In metaphysics Locke reduces causality to a relation, and his doctrine of the unknowable substance foreshadows Kant's "thing in itself." If knowledge, as Locke contends, is the agreement of ideas with each other, it is obviously impossible to attribute to the external world objective, substantial reality.

263. George Berkeley (1685–1753). — **LIFE.** — Berkeley was the son of an English customs-official in Ireland. He was educated in Trinity College, Dublin, where he was appointed lecturer in divinity and university preacher in 1721. One of his cherished plans was to found a missionary college in Bermuda, for which he obtained the promise of a government grant of £20,000. To show that he was in earnest, he sailed, not directly for Bermuda, but for the American Continent. After spending three years in Rhode Island, he realized that the Government's promise would not be kept, and returned to Ireland. In 1734 he was appointed Bishop of Cloyne. In 1752 he removed to Oxford, where he died in the following year. His principal philosophical work is his *Treatise on the Principles of Human Knowledge*.

264. PHILOSOPHY.—Berkeley extends the nominalist principle that only individual things exist, even to the content of our perceptions. There are two obstacles to true philosophy: the mistaken view that

there are abstract or universal ideas, and the supposition of external objects. The true function of philosophy is to study the divine wisdom as manifested in the laws of nature, or the connected and orderly succession of ideas, which God produces in our minds.

(1) *The Unreality of the Material World.*—All ideas simply express states of our mind, for, when we assert the existence of the external world, we mean that we are capable of certain sensations. The primary as well as the secondary qualities of objects are merely subjective. For (a) the secondary qualities of objects are admittedly subjective; now the primary qualities are inseparably joined with them; therefore, they also are subjective; (b) the very same arguments which prove the subjectivity of secondary qualities, apply equally to the primary. A thing is a constant aggregate of qualities (that is, of sensations and perceptions); therefore, its existence depends on the perceiving subject: *esse est percipi*. Unthinking matter does not exist, because it is inconceivable. Every possible idea must be a particular, concrete fact of consciousness.

(2) *Spirits Alone are Real.*—There are in existence nothing but spirits (that is, active beings, whose nature consists in thought and will) and ideas (that is, perceived, passive beings). Will is the sole form of activity. In addition to our ideas, we know ourselves, for we have a sense of distinction between ourselves and our ideas. The latter are fleeting and different from each other. The mind, on the contrary, possesses a sense of order, constancy, and coherence, which at once gives to it an independent existence, and to the ideas in it connection and order.

liness. The substance which supports the ideas cannot itself be an idea, for, while ideas are passive, the mind is active. Spiritual substance exists; material substance is unthinkable and useless.

(3) *God is the Author of Our Ideas.*—In addition to the perception of the existence of our ideas, necessity and coherence are the two distinctive characteristics of our sense-experience. The will does not cause our ideas, because it cannot cause their necessity and orderly sequence. Unthinking matter cannot cause them, because it does not exist. They do not cause themselves, for they are essentially passive. God alone is the sufficient reason of their existence and of their properties. Just as Berkeley denied the existence of extramental substance, but felt the necessity of the concept of substance for the explanation of our inner experience, so he eliminates all causality from the external world, admitting only the relation of co-existence or of constant succession of ideas, and then postulates a true cause as their sufficient reason. God's existence is deducible from the sensations which He produces in us; every sensation we have is a proof of His existence, because it is a manifestation of Him. God has infinite power and intelligence, because He controls all spirits at the same time, and suggests the same ideas simultaneously to different and endless varieties of minds.

The connected whole of the ideas, which God produces in us, we call nature. The laws of nature are the rules in accordance with which God excites ideas in us.

265. HISTORICAL POSITION.—Locke and Berkeley developed the empiric aspect of Cartesianism. Locke rejected the doctrine of innate ideas and main-

tained the passivity of the mind. From this he inferred that we can know nothing but our sensations, and that the concept of an external substance is a purely subjective conception. Berkeley drew this inference on the ground of the Cartesian criterion of immediate evidence. His argument for the non-existence of material being, drawn from the false assertion that there are no abstract ideas, confuses psychological with intentional being. If true being consists in being perceived, solipsism is the true explanation of all.

Berkeley's idealism, as Kant says, is pure empiricism. By consistently maintaining and applying the view of Descartes and Locke, that the object of consciousness is an idea, Berkeley was brought into the position of denying to the material world any existence outside the mind which perceives it. Like Malebranche and others of his predecessors, he was obliged to ascribe to God the origin of all our cognitive processes. In the place of Leibniz's world of quasi-spirits he put a world of spirits and their images—our sensations. Hume carried out this theory to its rigid consequences. Atheism and materialism are impossible on Berkeley's principles, which, however, involve the grave error of phenomenalism. Berkeley endeavored to defend Christianity by meeting contemporary agnosticism on its own ground.

266. David Hume (1711-76).—LIFE.—Hume was educated in the University of Edinburgh, his native city. From the practice of law he turned to commerce, but, finding both uncongenial, he set out for France in 1734. Here he spent three years in study, and wrote the *Treatise on Human Nature*. From

1746 to 1748 he was secretary to General St. Clair in France, Vienna, and Turin. In 1751 he returned to Edinburgh, where he resided for the next twelve years. During this time he wrote the *Inquiry Concerning Human Understanding*, *Inquiry Concerning the Principles of Morals*, *The Natural History of Religion*, *Of the Passions*, and other treatises. From 1763 to 1766 he was secretary of the embassy in Paris, and made the acquaintance of the Encyclopedists. In 1767 he accepted the post of under-secretary to General Conway, and spent the following two years in London. He retired to Edinburgh in 1769.

267. PHILOSOPHY.—With Hume the empiric tendency in philosophy culminated in sceptic phenomenalism.

(1) *Cognitive Elements*.—Simple perceptions, which we receive passively, are the primary constituents of knowledge. The more forcible perceptions are called impressions. They originate from unknown causes. The fainter perceptions are called ideas. They originate from impressions. Ideas may be strengthened into impressions. Impressions are the criterion of reality: whatever cannot be traced to impressions, is a fiction of the mind. Since all ideas are derived from impressions, there are no innate ideas. Impressions are subdivided into sensations (which arise in the soul from unknown causes) and into reflections (which are derived from ideas). Hence, the ideas and impressions of sensations precede those of reflections. Ideas, as Locke had already taught, are divided into simple and complex. The idea of substance is a purely imaginative concept, for, if it were derived from sensation, it

would be a color, sound or taste; and, if it were derived from reflection, it would be a passion or an emotion.

(2) *Association of Ideas*.—Ideas are associated in the mind according to: (a) the law of resemblance, resulting in the mathematical sciences; (b) the law of contiguity in time and space, resulting in the natural and mental sciences; (c) the law of cause and effect, resulting in reasonings concerning facts. In introducing these laws into his philosophy, Hume was obliged to invoke the aid of ideas differing from the unrelated particulars to which alone he concedes existence, contradicting his system and anticipating the *a priori* forms of Kant.

(3) *Analysis of Knowledge*.—There are seven philosophical relations of mind, which are expansions of the natural relations of association. They are classified: (a) into relations depending on the ideas which we compare (resemblance, identity, space and time, and quantity); (b) into relations which may be changed without any change in the ideas (degree, contrariety, cause and effect). The idea of cause is derived from the relation of contiguity and succession of perceptions. It is the result of custom, and has its origin in the imagination, which, however, does not work here so freely as in the case of fictions. Necessity is the propensity, which custom produces, to pass from one object to the idea of its usual attendant. Hence, there are neither necessary truths nor true principles, since all come from habit and experience. What holds good of necessity, obtains in respect to all other relations of necessity, to the ideas of efficacy, agency, power, force, energy, and all other productive qual-

ities. Hence, there is no uniformity of nature, no proof of the existence of God, no explanation of the empire of will over mind. For the necessary connection of cause and effect Hume substitutes the constant conjunction of phenomena. Thus, one of the basic ideas of the Aristotelean philosophy is reduced to imagination resulting from habit.

The imagination has a tendency to go on in the line in which it has been working. Custom and association, building on this foundation, have led us to attribute continued existence to objects even when they are not present, and to ascribe to them existence distinct from our perceptions. In reality, the world is simply a group of sensations. Since the principle of causality is mere expectation due to custom, no facts outside of consciousness are known to us.

Hume destroys the concept of a permanent self by applying to it his test of reality. We have no constant and invariable impression of self throughout the course of our life. We are merely aware of a succession of fleeting sensations without connection. Hence, what we term soul and self, is a mere fiction of the imagination.

In his essay on miracles Hume attacks the evidence for supernatural revelation. He endeavors to show that there has been an invariable experience in favor of the uniformity of nature, and that a miracle, being a violation of the laws of nature, cannot be established by as strong a proof as that which can be advanced against it.

(4) *Scepticism*. — In the philosophy outlined above, Hume reasoned himself into a frame of mind where the solid fabric of the world dissolved like a dream before his eyes. Yet he found in himself a

natural tendency to return to sound judgment. As long as our attention is directed to the matter, he explains, the philosophical interpretation of self and world prevails. But the moment our thoughts take their own course, our natural tendency asserts itself, and brings back our former conviction of the reality of our self and of the world. Hume did not expect the acceptance of his philosophy. He declared himself satisfied in having shown that the natural convictions of the mind are false. "I am affrighted and confounded with that forlorn solitude in which I am placed by my philosophy. . . . When I return to these speculations, they appear so cold, and strained, and ridiculous that I cannot find in my heart to enter into them farther." This was his final judgment on his own philosophy.

(5) *Ethics*.—Will is the consciousness, or feeling, that we originate a movement. The process of willing and acting is perfectly regular and mechanical. The laws of conduct are subject to a mechanism as regular as the laws of motion or any other physical law. Pleasure and pain, to which we owe the notions of good and evil, are the motives of human action. What we call freedom is an illusion. Yet virtue and vice deserve praise and blame, just as we find beauty and genius worthy of admiration, even though they are quite independent of the will. All moral criteria are ultimately founded on a feeling of pleasure or displeasure which an action causes in others. Hence, virtue is that which pleases, and vice is that which displeases. Actions cause pleasure or displeasure according to one's capacity for appreciating them in others. The last end of all action is utility, rather the utility of an action for society than for the one

who does the action. The interest of the agent is the only obligation to virtue. All our duties to others are ultimately our own true self-interest.

Justice is not a natural virtue. It is conventional, and arises only in society. Desiring peaceful possession and mutual support, men formed society from self-interest. The experience that society cannot exist without a division of goods, originated the right to property. Society does not arise from a contract, and it can exist without a government. Society became a State through the formation of government. The ideal state should have an hereditary monarchy, a nobility without dependents, and a people voting through representatives.

268. HISTORICAL POSITION.—Scepticism is the last phase of empiricism. Berkeley desired to avoid scepticism. His philosophy is a valiant though unsuccessful attempt to save the truths of the soul and of God from the destroying hands of materialism. He did not realize that, in denying the existence of the external world, he prepared the denial of the spiritual world. With a philosophic consistency which neither Locke nor Berkeley possessed, Hume drew the sceptical inferences which are implied in empiricism. He pronounced substance, soul and God to be fictions, and admitted the existence only of a group of sensations. Hume's doctrine about the relations of ideas became the starting point of Kant's *a priori* forms. In the very beginning of his philosophy Hume tacitly assumes the existence of the external world as the cause of our sensations.

Hume's influence was far-reaching. Kant says that Hume awoke him from his dogmatic slumber,

ADAM SMITH (1723-90) made Hume's theory of moral action the principle and criterion of ethics. The Scottish School under THOMAS REID (1704-96) was a reaction against Hume. The associationist psychology descends from Locke and Hume. ERASMUS DARWIN (1731-1802) developed it into a theory of biological evolution.

CHAPTER IV

CRITICISM

269. Introduction.—The philosophy of the Enlightenment received its fullest expression when the various currents of thought which had been started in the eighteenth century converged in Germany. The problems of the relation of sensation to intellection, of mind to will, and of philosophy to science, which the rationalists and the empiricists had left unsolved, were now taken up by Kant in the endeavor to find a solution for them by a new method. The philosophy of Kant was in its turn taken up by a group of brilliant minds in the universities and literary centers of Germany. Thus, a number of grandiose but subjectivistic systems of philosophy developed, of which idealism is the common character.

270. Immanuel Kant (1724–1804).—**LIFE.**—Kant was the grandson of a Scottish emigrant, and attended the University of Königsberg, his native city. The death of his father in 1746 obliged him to interrupt his studies and earn his own living as a private tutor. In 1755 he was enabled to resume his studies, took his degree, and qualified as *privatdocent* (tutor). During the fifteen years in which he taught in this capacity, he was obliged because of his poverty to lecture from sixteen to twenty hours a week. His lectures covered a wide range of subjects: logic,

metaphysics, ethics, natural theology, methodology, anthropology, physical geography, pedagogics, mathematics, and physics. Though he had twice failed to obtain a professorship in Königsberg, he steadily refused appointments elsewhere. In 1770 he obtained the chair of logic and metaphysics in Königsberg. As his philosophy had a decided tendency toward moral rationalism, he met with opposition from all believers in positive Christianity. In 1792 the publication of his book *On Religion within the Limits of Reason Alone* in the *Berliner Journal* was forbidden by the Prussian Government. When he published it in Königsberg, the king expressed his displeasure and exacted a promise from Kant not to lecture or write on any religious subjects in the future. This incident had a depressing effect on Kant. He withdrew from society and abandoned all his classes with the exception of one on logic and metaphysics. In 1797 he retired from university teaching. Kant's principal philosophical writings are *Kritik der reinen Vernunft* (1781); *Prolegomena zu einer jeden künftigen Metaphysik* (1783); *Grundlegung zur Metaphysik der Sitten* (1785); *Kritik der praktischen Vernunft* (1788); *Kritik der Urteilskraft* (1790); *Die Religion innerhalb der Grenzen der blossen Vernunft* (1793).

271. PHILOSOPHY.—The importance of Kant for the history of philosophy lies in his attempt to lay a new foundation for the understanding of man's relation to the world. He gathered up the various tendencies of modern philosophers who had preceded him, and combined them into a new synthesis. Describing his own philosophical development, Kant says that at the outset he adhered to Wolff's dogma-

tism (cfr. below, n. 279), from which he went over to Hume's sceptical empiricism, and finally constituted a new system, which he termed "Critical Philosophy."

I. THE CRITIQUE OF PURE REASON: THEORY OF KNOWLEDGE

272. *Analysis of the Process of Cognition.*— Knowledge is the product of two factors: the receptive faculty called sensibility, and the spontaneous faculty called understanding. The faculty of cognition supplies the material of cognition; that is, an unknown cause gives rise to sensations in our consciousness. The understanding then invests our sensations with the intuitions of time and space, evolves them into representations of objects by means of the twelve categories (especially those of substance and cause), and organizes these representations into a rational conception of the world. The Kantian forms of the understanding are the *a priori* ways of the mind's functioning, which give shape to the impressions of sense and are essential to all experience. They comprise the arrangement of impressions under the intuitions of space and time, under the categories of the understanding, and according to the ideas of reason. The intuitions are empiric (or objects of sense immediately known) and pure (or the *a priori* representations of space and time). The categories are the constitutional forms of the functioning of the intellect in judgment. The categories are: (1) those of quantity, embracing unity, plurality, and totality; (2) those of quality, embracing reality, negation and limitation; (3) those

of relation, embracing substance and attribute, cause and effect, action and reaction; (4) those of modality, embracing possibility, actuality, and necessity. The Kantian ideas are transcendental conceptions of pure reason, the verification of which is beyond the powers of knowledge, but which set the goal of reflection and worthily determine conduct: such are the ideas of God, free will, and immortality.

Kant's theory of the co-operation of experience and thought-factors in the process of cognition synthesizes empiricism and rationalism. Kant arrives at the proof of his theory by a consideration of the prerequisite which makes possible universally valid and necessary judgments regarding empirically given data. The capacity of the mind, prior to all experience, for making certain universally valid predications regarding these data, can be explained only on the supposition that the mind is a creative principle, which produces the forms of cognition from itself. The judgments thus formed are synthetic judgments *a priori*. They are synthetic, because their necessary and universal character springs from the synthesis of purely mental, necessity-making categories in the understanding with the contingent and constantly changing data of sense experience. They are *a priori*, because these categories are an innate property of the mind, preceding experience, and are an essential condition for it.

273. *Metaphysics.* — Theoretical knowledge is limited to the sphere of consciousness. Whatever is beyond consciousness, is unknowable. Only this is certain: a cause outside of consciousness gives rise to our sensations. Hence, metaphysical knowledge is impossible, because its object is a supersen-

sible and ideal world. Though the content of consciousness is the only object of our knowledge, there is a real difference between true and false representations. True representations are those which exist in the mind independently of our will, and are caused by a superindividual principle in us, called transcendental apperception—that is, self-consciousness in synthetic perception. False representations are capricious products of the empiric, or the individual consciousness. In the sense of these principles Kant designates his philosophy as empiric or transcendental realism.

II. THE CRITIQUE OF PRACTICAL REASON: THEORY OF WILL

274. (1) *Analysis of Moral Consciousness*.—The cognitional and the moral faculties are essentially different, but they resemble each other in having *a priori* forms. The moral law is the *a priori* form of the ethical faculty. It is empty, like the categories of the understanding, and issues to us an unconditional and binding command to do what we have recognized as morally good. The absolute claim of the moral law to our obedience is called the categorical imperative. This claim is unconditional, because it imposes on us the moral obligation of making respect or reverence for the law the sole motive of our compliance with it. The supreme principle of morality is expressed in the formula: “Act in conformity with that maxim, and that maxim only, which you can at the same time will to be a universal law.” “Always treat humanity, both in your

person and in the persons of others, as an end, and never merely as a means."

(2) *Ethical Realism*.—The morality inculcated by Kant is called autonomous morality, because in his view it is founded solely on the practical reason of man. The moral law can be realized only on condition that the will is free, that the soul is immortal, and that God exists. If these conditions were not fulfilled, the realization of the moral law, which consists in the attainment of the highest good by the acquisition of moral perfection and corresponding happiness, would be impossible. Hence the transcendental ideas (God, free will, and personal immortality) have a practical reality for us: they are postulates of practical reason. The moral law guarantees them: (a) it guarantees the reality of freedom, because the moral law has no meaning for us unless we can do what we ought to do; (b) it guarantees the immortality of the soul, because the soul needs an indefinitely prolonged life to work out its ideals; (c) it guarantees the existence of God, because the imperative nature of the moral law implies that there exists somewhere a good which is not only supreme, but also the complete embodiment of all the conditions implied in the moral order.

(3) *Philosophy of Religion*.—Religion and morality do not differ essentially. On the basis of his theoretical agnosticism Kant is constrained to reject all dogmas and all speculative theology. The office of religion and of the Church is to educate men to perfect morality by means of a faith or conviction of pure practical reason. The only duty of man toward God is to live a moral life in accord with the

categorical imperative. The more the ethical element displaces the "statutory" element in religion, the more the religions of history approach the absolute religion. Christianity is the most perfect religion, if we understand its dogmas as symbols of ethical facts. Thus, belief in the Creator is the conviction that the moral law, as manifested by the categorical imperative, is the supreme and absolute standard of conduct. Providence is the permanence and stability of this law. The sanction of this law is the conviction of the value of ethical judgment, distinguishing moral good from moral evil. Kant interpreted all the doctrines of Christianity in a symbolic sense; for example, he understands original sin as a tendency to evil, naturally present in the will. He also formally rejected the divinity of Christ.

III. THE CRITIQUE OF JUDGMENT: THEORY OF ENDS

275. *Reflective Judgment.* — Reflective judgment applies the categories of practical reason to the object of theoretical reason. This application is neither knowing nor willing, but a *third form of mental activity*, which consists in the consideration of nature from the point of view of its adaptedness to ends. When we consider nature from the point of view of its adaptedness to our contemplation of it, we form esthetic judgments, which have regard, therefore, for our mode of feeling. On the other hand, when we consider nature from the point of view of its adaptedness to attain objective purposes, we form teleological judgments, which, therefore, have regard to nature in itself.

276. *Analysis of the Beautiful and the Sublime.*—The feeling of beauty arises when the object apprehended causes the *a priori* forms of sensibility and understanding to co-operate in a harmonious manner. Because of this harmonious co-operation of these faculties, which is caused by the object apprehended, the object is adapted to our contemplation. The disinterested pleasure which arises in this way and claims the universal assent of men, is beauty. The sublime is the overwhelming greatness of the object which makes us realize the inadequacy of our sense perceptions to comprehend it, but also causes delight in the mind when its *a priori* forms master this object.

277. *Mechanism and Teleology.*—The scientific explanation of nature consists in showing the causal necessity by which one phenomenon produces another. There is no intrinsic teleology in objects, intending and adapting them to the attainment of ends. But, when the causal theory of natural science is unable, because of the *a priori* forms through which the mind perceives the data of science, to explain the given material, we supplement the causal by the teleological explanation in so far as the inexplicable residue makes upon us the inevitable impression of purposiveness. However, this apprehension of purposiveness is never an act of knowledge. It is a subjective construction of the mind.

IV. HISTORICAL POSITION

278. SOURCES.—Kant is the most influential philosopher of modern times. Outside of Catholic circles, his ideas, like a powerful ferment, had every-

where dominated and saturated the speculative thought and the practical endeavor of the Western World up to the time of the great war. Possessing small knowledge and smaller appreciation of the philosophers who had preceded him, Kant shared with other philosophers of the Enlightenment the view that reason, not experience, is the starting point of investigation. Hume was his predecessor in denying substance and causality. CHARLES BONNET (1720–90) of Geneva prepared the doctrine of the *phenomenon* and the *noumenon*. JOHN TETENS (1736–1805) of Copenhagen, whose book, as Hamann says, always lay open on Kant's table, anticipated the doctrine of the faculty of sensibility as supplying the material, and the doctrine of the understanding as contributing the forms of knowledge.

279. NEW ELEMENTS.—Kant's analysis of cognition is a remarkable advance over Hume, who had "roused him from his dogmatic slumber." In separating the question of the origin and nature of knowledge from that of its value, Kant overcame Hume's sceptical empiricism, and completed the development of the subjectivism which Descartes had introduced into philosophy. Kant opposes empiricism by maintaining the universality and necessity of judgments as being effected by *a priori* mental forms. He agrees with empiricism that these forms can act only on the data of experience. Hence he argues that metaphysics is impossible, since its object is not given in the data of experience. Kant adopted the idealistic point of view, because it appeared to him the only means of establishing scientific knowledge. He believed that he possessed incontestable evidence that the action of objects upon

our senses is incapable of accounting for the universality and necessity of judgments. Kant's solution of the epistemological problem marks the final abandonment by modern philosophy of the old theses of the objectivity of knowledge and the existence of the supersensible.

280. INFLUENCE.—The philosophy of Kant is the unbridgeable chasm which separates the philosophy of the past from modern thought. The leaven of ideas, the infiltration of which into every field of thought and endeavor makes Kant the controlling philosopher of the non-Catholic world to-day, consists in the formal and subjectivistic solution of epistemological and ethical problems.

The result of the radical change thus effected in the attitude of men toward philosophical and religious questions is rather the abandonment of old views than the attainment of new and loftier convictions. Witness the futile attempts of the idealists succeeding Kant to complete and remodel the details of his philosophy, and the largely negative results in fundamentals of a century of the most intensive study of the epistemological problem. The systems of philosophy which developed under the influence of Kant are alterations rather than progressive developments of his ideas. These systems are Fichte's, Schelling's, and Hegel's idealism, explaining the world as a system of reason; Schleiermacher's philosophy of sentiment; and Schopenhauer's metaphysics of the irrational.

The immanent cause of the extraordinary influence of the philosophy of Kant lies in the appeal of the doctrine of the superiority of understanding over sensibility, of the autonomy of knowledge and will,

and of the primacy of practical over theoretical reason, and in the voluntaristic and ultra-individualistic cast of mind which grew out of the so-called Reformation. The external sources of its power are found in the prestige which it won from its being accepted by German scholars and men of letters, and by the rivalry evoked by the philosophy of Spinoza, for which F. H. JACOBI (1743–1819) obtained favorable reception.

The application of the philosophy of Kant to Catholic doctrine is modernism. Kant's teachings are incompatible with the Faith, because they falsify the nature and origin of religion, destroy the foundations of supernatural faith, and garble every dogma. In dogmatics Kant proposes metaphysical agnosticism and symbolism; in ethics, moral dogmatism.

281. VALUE.—Kant destroyed the organic unity of philosophy by separating the subject from the object by a chasm which no man can cross. In the place of the old dualism he created a new dualism of *phenomenon* and *noumenon*. He definitely disregarded the psychology of cognition, and failed to see the value of the conclusions of psychology as a basis for criteriology.

The Critique of Pure Reason was placed on the Roman Index of Forbidden Books in 1827. However, it opened new vistas and occasioned the development of the Scholastic science of criteriology on the foundations which medieval scholars had laid centuries before, contributed to the revival of Scholasticism as a reaction against its errors, and gave the impulse which produced a vast number of illuminating studies in the details of epistemology.

Kant misunderstood the very nature of the so-called categories, and his followers have long since recognized the arbitrariness of his scheme of mental forms. The principal errors of Kant's epistemology are the doctrines of synthetic judgments *a priori*, of the blind and subjective character of judgment, and of the unknowableness of the thing in itself.

Kant propounds duty with an earnestness seldom equalled; but the ideal of autonomous virtue—duty for duty's sake—is unethical. In the domain of conduct Kant makes reason (which he declares wholly incompetent for theoretical knowledge) the sole and absolute principle of law and duty. By setting ethical will and natural desire into fundamental opposition he introduced an insoluble conflict into ethical endeavor.

The principal danger to which the Kantian philosophy exposes the mind is the destruction of its natural rectitude and love for clearness, for constant compromise blunts the mind's power of discerning truth from error.

Section II

THE NINETEENTH CENTURY

282. Characteristics.—Despite an extensive study of philosophy, the nineteenth century was not a philosophical century, for its attention was given to and its results were obtained mainly in the domain of historical and experimental science. The decisive factor in the philosophical development of the nineteenth century is the question as to the degree of importance which the natural-science conception of phenomena may claim for our view of the world and of life. In what degree does the individual owe to himself that which makes life worth living? In what degree does he owe it to his environment? Or does he owe it essentially to God? Men incline toward a natural-science conception of philosophy, because (1) its solutions of philosophical problems are clear for the imagination and perception, and (2) because of the evident utility of natural science.

283. Currents.—The main currents of philosophical thought in the nineteenth century are: (1) the idealism of Fichte, Schelling, and Hegel, together with their offshoots of Schleiermacher's sentimentalism and Herbart's realistic reaction against Hegelianism; (2) the pessimism of Schopenhauer, Hartmann, and Nietzsche; (3) Comte's positivism, which is rather a method than a system of philosophy; and (4) Christian philosophy, comprising ontologism, traditionalism, and Scholasticism.

CHAPTER I

IDEALISM

284. Johann Gottlieb Fichte (1762-1814).—LIFE.—Fichte entered the University of Jena in 1780 as a student of theology. From 1784 he supported himself by private teaching and miscellaneous literary work. In 1793 he was appointed professor of philosophy at Jena. Six years later he was charged with atheism, and lost his position. In 1809 he was appointed professor in the newly established University of Berlin. His principal writings are: *Versuch einer Kritik aller Offenbarung*; *Grundlage der gesammten Wissenschaftslehre*; *Grundlage des Naturrechts*; *System der Sittenlehre*.

285. PHILOSOPHY.—The Ego.—"All that is, is the ego." Recognizing the doctrine of the thing in itself as a contradiction in the Kantian system, Fichte declared the ego to be the only reality. He distinguished the absolute ego (the non-individual being, neither subject nor object, which posits the world of individual egos and non-egos) and the empirical ego (which is the self as in fact known to itself). The derivation of the non-ego from the ego is the basic problem of Fichte's philosophy. His thesis is that the non-ego is a limitation posited by the absolute ego for the purpose of exercising its freedom. In proof of this thesis he argues that infinite striving, doing, or willing is the essence of the ego; now, in

order to put itself into action, every impulse needs an object; for this reason the ego effects the non-ego—that is, the world as representation.

God.—The ego in which the world exists is not the empirical, but the absolute ego—a universal self common to all finite selves, which, when all the limiting elements of finitude are eliminated, is equivalent to God. The moral order is the only divinity in which we can believe. All life is its life, and the manifestation of this life is the development of humanity. God is not a personal being, for every personal being is finite and limited. In his later philosophy Fichte developed this ethical pantheism into objective pantheism.

Science of Knowledge.—Fichte's science of knowledge is an attempt to deduce *a priori*, from the principle of identity, God, nature, the individual self, and every field of human knowledge, on the supposition that action is the essence of all things.

Ethics.—To be virtuous is not to obey some external law, but to fulfill the inner law of one's being. We must do our duty only for the sake of duty. The moral life is a progressive life, and the aim of man is to lose himself in God by the spirit of self-abnegation and devotion. Fichte advocates the doctrine of the "right to work," saying that the State must make provision so that every one may be able to live by his work. From this principle he projects his ideal of the "socialistic state" as the complete industrial commonwealth, which is to undertake all home manufactures and all trade with foreign countries in order to assign to each citizen his work and his wages. He foresees the time when by organization and division of labor all property will be owned

in common. "Workmen will associate themselves for the production of the greatest amount of wealth with the least possible amount of labor."

286. CRITICAL NOTE.—Fichte's philosophy is voluntaristic idealism, founded on Kantianism and elaborating certain features of it. Fichte's solipsism really terminates in nihilism. For, if the ego can come to know itself only through the non-ego, which is a product of its own activity, then the ego is dependent for its existence on the non-ego. Kant taught that experience is dualistic, being derived from the concurrent action of sensation and spontaneous activity. Fichte denied this dualism, asserting that the sense element in experience cannot be traced to the action of objects independent of the percipient subject. The earlier phase of Fichte's philosophy is atheistic, the later phase is pantheistic. Fichte's philosophy found little acceptance, but it was the impulse which gave rise to the systems of Schelling and Hegel, who attempted to correct its one-sidedness. Fichte's absolute ego is closely akin to Kant's pure consciousness and practical reason.

287. Friedrich Wilhelm Josef von Schelling (1775-1854).—**LIFE.**—Schelling graduated in the philosophical faculty of Tübingen in 1792. He taught in Jena (1798-1803), Würzburg (1803-06), Erlangen (1820-26), Munich (1827-41), and Berlin (1841-45). A clear sketch of Schelling's philosophy is found in his *Erster Entwurf eines Systems der Naturphilosophie*; a popular exposition of it is contained in *Vorlesungen über die Methode des akademischen Studiums*. Schelling was called to the University of Berlin in order to counteract the pantheism of Hegel; but, when the Prussian Government

failed to give him redress against the surreptitious publication of his lectures, he resigned his position. His influence in Berlin was insignificant, because in the quick change of philosophical fancy materialism had already succeeded idealism.

288. PHILOSOPHY.—Schelling's system is a philosophy of identity, in which the difference of nature and spirit is so completely merged that the reality of both is lost, and the absolute becomes the point of indifference which can be apprehended only by mystic contemplation or intuitive feeling. Schelling did not succeed in formulating a finished system. It is customary to distinguish three phases in his philosophical development.

(1) *The Philosophy of Nature*.—(a) Nature is the product of the absolute ego, or, from another point of view, one of the forms in which the absolute ego appears. The absolute ego reveals itself in three successive forms: undetermined primal being, qualitatively determined matter, and life. (b) This progressive evolution is effected by the opposing factors of infinite productivity and its present product. (c) The succeeding products are more perfect manifestations of the preceding ones. (d) Nature and spirit, the real and the ideal, are different forms of the revelation of the same actuality.

(2) *The Philosophy of Identity*.—(a) Continuous becoming is the essence of the absolute substance, the process of the evolution of which begins with nature and culminates in spirit. (b) In this theory Schelling agrees with Spinoza that the absolute is an empty category. It is the point of indifference between the real and the ideal, attaining a real content only through its attributes or manifestations.

Hence God is identical with the universe. (c) Schelling differs from Spinoza in regarding the essence of the absolute as continuous becoming, and in asserting a preponderance of the real or of the ideal in different objects. The essence of the absolute substance of Spinoza is quiescent being, and there is a perfect parallelism between the modes of thought and those of extension.

(3) *The Positive Philosophy*.—(a) In this phase of his philosophy Schelling undertakes to determine the nature of God and His relation to the world. (b) The absolute is a real substance distinct from the empirical world. The world is an emanation from God in the sense of Neo-Platonism. Proximately the world emanates from a system or group of intelligible ideas, which have fallen away from God. (c) Considered as a whole, the process of emanation comprises three stages: God as the indifference of opposites; God as the disunion of opposites (reason and existence, the real and the ideal); and God as the reconciliation of opposites. This process of evolution is a theogony as well as a cosmogony. (d) The antagonism of the universal and the individual will is the cause of the progressive perfection of these emanations. (e) Evil is the opposition of the individual to the universal will. Hence, evil is grounded in the very nature of God, and is overcome by the progressive perfection of the products of the process of emanation.

Philosophy of Mythology and Revelation.—Pagan religions are the necessary preparation for Christianity. There are three stages of Christianity: Petrine or Catholic, Pauline or Protestant, and Johannine or the religion of the future.

289. CRITICAL NOTE.—(1) Schelling's philosophy is hardly an advance over Fichte's, though Schelling influenced Hegel and Schopenhauer through philosophical aspects which Fichte had neglected. Both Fichte and Schelling regard experience as the total of reality, but the former considers it as an external fact, the latter as endless becoming. The absolute ego and the moral impulse of Fichte correspond to the absolute identity and the esthetic faculty of Schelling. The philosophy of Fichte is exact, subtle, and stern; that of Schelling is vague, clumsy, and romantic.

(2) Kant's *Critique of Judgment* is the starting point of Schelling, who developed many of Kant's ideas on the sublime and the beautiful.

(3) Schelling's absolute reason is equivalent to Spinoza's substance, with the modifications mentioned above. The idea of becoming, which Schelling resuscitated in the course of his Greek studies and made the basis of his system, became one of the most fruitful ideas for good and evil in the nineteenth century through the medium of Hegel's system of absolute evolution.

(4) Schelling's positive contributions to modern philosophy are the doctrine that nature, no less than the ego, is a manifestation of thought; that the absolute is the principle common to nature and the ego; and that there is a real distinction between the absolute and the empirical world. Thus, the philosophy of Schelling ends in dualism.

290. Georg Friedrich Wilhelm Hegel (1770–1831).

—**LIFE.**—Hegel was a native of Stuttgart. In 1788 he entered the University of Tübingen as a student of theology, which however failed to arouse

his interest. In 1790 he took his degree in philosophy. Three years later he obtained his theological certificate, which qualified him as possessing good ability, middling diligence, and as being especially deficient in philosophy. From 1793 until 1800 he was a private tutor in Bern and Frankfort. In 1801 Hegel became *privatdocent* of philosophy at Jena, and in 1805 assistant professor. When Napoleon came to Jena in the following year, Hegel accepted the rectorship of a *gymnasium* in Nuremberg. He held this post until 1816, when he received a professorship in Heidelberg. In 1818 he became Fichte's successor in Berlin, where his solidarity with the Government gave him a strong position. Hegel's students were always few in number, but his influence upon them was great. The obscurity of his language turned away many from his courses. He trained a number of exceptionally gifted pupils, chief among whom are Erdmann, Kuno Fischer, and Zeller. Hegel's principal writings are: *Phänomenologie des Geistes*; *Wissenschaft der Logik*; *Enzyklopädie der philosophischen Wissenschaften*; *Grundlinien der Philosophie des Rechts*.

291. PHILOSOPHY.—Taking the unity of consciousness as a starting point, Hegel attempted to unite into a higher synthesis the opposites of mind and matter, nature and spirit, phenomenal and noumenal world, which some of his immediate predecessors had recognized, and of which others had suppressed one of the correlatives. His system is designated as *absolute idealism*, because he holds that all existences have their reality only as ideas in the universal reason. Hegel's basic thesis is that the ultimate source of all things is a spiritual principle, the

essence of which is thought—not will, as Fichte maintained, nor the point of indifference between thought and will, as Schelling asserted. Hegel's philosophy comprises three parts: logic, the philosophy of nature, and the philosophy of mind.

(1) *Logic*.—Hegel's logic is the statement of the abstract conditions of consciousness, and the evolution of the categories which we use in thinking the world under the progressive heads of pure being, essence, and concept. (a) All reality is a system of logical concepts, which evolve from one another of dialectical necessity. The law of the identity of thought and being is the controlling assumption of the theory of dialectical evolution. (b) The rhythmic advance of thought, and consequently of reality, takes place according to the formula of thesis, anti-thesis, and synthesis. Every concept is bound up with contradictions, which are to be eliminated by means of a higher concept reconciling opposites. (c) Dialectical evolution terminates and culminates in the concept of the absolute idea, which contains in their totality all the thought-elements evolved from the primal idea of being.

(2) *Nature*.—The philosophy of nature is the statement of the forms of the external world in and through which reason becomes concrete. (a) Thought loses its inwardness and is disclosed in its objectivity in the relations of space and time. (b) The philosophy of nature is divided into three parts: mechanics, which deals with matter in its pure objectivity; physics, which deals with the forms and relations of inorganic nature; and organics, which deals with life.

(3) *Mind*.—The philosophy of mind deals with

the stages through which consciousness passes from the simplest forms of physical activity to complete self-consciousness. Here the idea is represented as returning from the outwardness of nature into itself. The philosophy of mind is divided into three parts: subjective, objective, and absolute spirit. The purpose of this part of Hegel's system is to show the logical and teleological evolution of the human mind from the first beginnings of consciousness to the highest stage of the perfect spirit, which consists in the philosophy of absolute idealism.

I. The Subjective Spirit.—(a) The mind dissociates itself from nature, and thus becomes a self-conscious, or subjective spirit. (b) The process of dissociation has three stages: soul, consciousness, and the spirit as such. These Hegel deals with under the respective heads of anthropology (which has to do with the physical conditions of the soul), phenomenology (which treats of the soul as the pure ego), and psychology (which deals with conation).

II. The Objective Spirit.—(a) By recognizing its identity with the universal spirit of mankind, the subjective spirit becomes objective spirit. The doctrine of the objective spirit embraces ethics, the philosophy of right, the State, and history. It is divided into rights, morality, and social ethics. (b) Hegel separates right and morality, and makes a higher synthesis of them in social ethics. He has the pre-Christian view of the State as the source and impersonation of morality and social ethics. The State absorbs all rights of the individual, and is the true end of man.

III. The Absolute Spirit.—(a) By recognizing its essential identity with God, the objective spirit

evolves itself into the absolute spirit. Here the distinction between subject and object is obliterated, and the infinite is recognized as the essence of the finite. (b) Art, religion, and philosophy, corresponding to perception, feeling, and thought, are the three stages of the evolution of the objective into the absolute spirit. Art is the perception by the absolute spirit of the ideal of beauty realized in sensible form. Religion is the inward exaltation of the soul to the absolute. Philosophy is truth in its absoluteness—the thought of the self-thinking idea. (c) Religion has passed through a series of progressive stages. Nature-worship, wherein God is conceived as a natural power in which the finite subject is merged, is the lowest form of religion. Next above this form of religion are ranked the spiritual religions. They are Judaism, the religion of sublimity; Hellenism, the religion of beauty; and the Roman religion, which is the religion of utility and purpose. Christianity is the highest, or absolute religion. It is a synthesis of nature worship and humanism. Its essential content is the essential identity of God and man. (d) By the application of his dialectical formula Hegel also endeavored to show the evolution of the various systems of philosophy which have appeared in the course of history.

292. CRITICAL NOTE.—It is impossible not to admire the grandeur of Hegel's system. Its influence is due to its universal scope, its coherence, and the vast amount of material which is systematically arranged in it.

The hypostatized ideas of Plato and of Heraclitus' philosophy of becoming are the historical pro-

totypes of Hegel's system. His conception of the absolute and his philosophy of nature are borrowed from Schelling. His dialectical method is derived from Fichte, but he applies it more thoroughly and consistently than did his prototype. His conception of the categories of the mind as an organic unit is an advance over Kant's arbitrary arrangement of them.

Acknowledging neither God nor personal immortality, Hegel propounds the doctrine of the Omnipotent State, which is the source of all the rights of man and is his true end. Because of his influence on Altenstein, the Prussian Minister of State, Hegel in his own time was termed the official Prussian State Philosopher.

Hegel's valuation of Spinoza's pantheistic evolution may be judged from his statement that "to be an adherent of Spinoza is the essential beginning of all philosophizing." Hegel's philosophy was the most powerful single factor that contributed to make the idea of evolution the dominating influence in philosophy and science in the nineteenth century.

293. Friedrich Daniel Ernst Schleiermacher (1768-1834).—LIFE.—Schleiermacher was a native of Breslau. Dissatisfied with the Moravian teachings of the college in Barby, whither his parents had sent him, he entered the University of Halle in 1787. After three years he obtained his licentiate and became pastor of various churches. From 1804 until 1807 he was university preacher and professor of theology in Halle. In 1810 he became professor of theology in the newly founded University of Berlin. Schleiermacher's principal writings are: *Reden über die Religion; Monologe; Grundlinien einer*

Kritik der bisherigen Sittenlehre; Der christliche Glaube nach den Grundsätzen der evangelischen Kirche.

294. PHILOSOPHY.—Schleiermacher was the theologian of German romanticism, just as Schelling was its philosopher. Schleiermacher's philosophy of religion is built up on Schelling's system of identity, and may be characterized as the philosophy of feeling.

(1) *Philosophy of Religion*.—(a) God is the impersonal identity of the real and the ideal. If we understand God in this sense, knowledge necessarily presupposes the existence of God, because it presupposes the agreement of being and thought. Reason is incapable of forming a true concept of God. Feeling, as the unity of subject and object, of intellect and will, is the means through which we become conscious of the nature of God. (b) Religion is the feeling of absolute dependence upon God. Dogma, morals, and worship are secondary functions of religion, and depend entirely upon the religious individuality of man. The value of a religion lies in the personality of its founder, and in the re-experience by his followers of his own religious experience. Christianity is the most perfect religion. Christ is the ideal of man, distinguished from other men by His habitual and perfect consciousness of God. Religion is an integral part of human personality: it is the keystone of the harmonious development of the individual.

(2) *Virtue*.—Virtue consists in the harmonious development of all human faculties, approaching the divine identity of nature and reason. Schleiermacher substitutes the divine identity of the real and

the ideal for the categorical imperative of Kant. As the soul is not immortal, the ethical ideal is to be attained in this life. "Act at every moment with thy whole moral power, that is, with all virtues, and having in view the entire moral problem, that is, all goods (*alle Güter*)."

295. CRITICAL NOTE.—In his attempt to overcome idealism and pantheism, Schleiermacher arrived at a system of sentimental humanitarianism. He subjectivized religion, transferring it from the domain of intellect to that of feeling. His view of God is pantheistic. Schleiermacher is one of the founders of modern religious agnosticism and of liberalistic Protestant theology.

296. Johann Friedrich Herbart (1776–1841).—As professor in Göttingen and Königsberg, Herbart began the reaction against Kant. His philosophy represents a middle position between criticism and idealism. He agrees with Kant in founding his system on empiric facts; he differs from Kant in maintaining that we have a mediate knowledge of the supersensible nature of things. Herbart describes philosophy as the elaboration of concepts.

PHILOSOPHY.—(1) *Metaphysics.*—"So much appearance, so much intimation of reality." All empiric concepts are bound up with contradictions, which result from the relating of concepts by apperception. The principal contradictions which attach to our concepts are inherence, change, matter as a spatial continuum, and the ego. Being is simple, immutable, and unspatial. There are many "reals," or elementary bodies, which constitute the world.

(2) *Psychology.*—The soul is a primordial monad. Psychology is the science of the mathematical laws

which govern the action and reaction of its representations. Herbart rejects Aristotle's theory of the faculties of the soul, and derives all the phenomena of consciousness from representations by means of the mathematical method. Representations are the soul's acts of self-conservation. They are independent beings in a state of reciprocal tension.

(3) *Practical Philosophy*.—Ethics is founded on esthetic judgments, and is independent of religion. Religion is founded on the ethical needs of humanity. The faculty of judgment guarantees the validity of our ethical ideals by means of the primal ideas of inner freedom, perfection, benevolence, right, and equity.

297. CRITICAL NOTE.—Herbart's metaphysics is a combination of the Eleatic doctrine denying change and the monadology of Leibniz. His mathematical method anticipates Fechner's psychophysics. His pluralistic idealism is opposed to the monism of Fichte, Schelling, and Hegel. Herbart exerted a marked influence on German pedagogics.

CHAPTER II

PESSIMISM

298. Arthur Schopenhauer (1788–1860).—LIFE.—Schopenhauer was born in Danzig, where his family belonged to the mercantile aristocracy. Disliking a business career, he entered the University of Göttingen in 1809. From 1811 to 1813 he studied in Berlin. In 1813 he obtained his degree from Jena. In the following years he studied art, interested himself in Goethe's theory of colors, and wrote his principal work, entitled *Die Welt als Wille und Vorstellung*. After a journey to Italy he became *privat-docent* in Berlin in 1820. His philosophy found no recognition, because Hegelianism held the attention of men of letters and was favored by the authorities. Embittered by disappointment, he remained in Berlin until 1833, when he settled in Frankfurt. The earliest recognition which came to him was the award of a prize by the Norwegian Academy of Sciences and election to membership in it in 1839. In the years which followed, he won an increasing number of adherents.

299. PHILOSOPHY. — Schopenhauer's philosophy may be characterized as the metaphysics of the irrational, as it finds in the will the ultimate principle and explanation of all things. The philosophies of ancient India, which Schopenhauer had begun to

study in 1813, were an important factor in the development of his system of thought.

(1) *Theoretical Philosophy*.—(a) Blind primordial will is the first principle of all things and the nature of all reality. All else is merely a subjective phenomenon of consciousness. Hence, Schopenhauer divides reality into the world as will and the world as idea (*Vorstellung*). The immediate intuition of our inner experience proves to us that will is the essence of the noumenon. The body is the externalized will, and the whole world of nature is the embodiment of the primal, universal will. (b) In accord with these principles, Schopenhauer explains consciousness as a secondary product of will, and space, time, and causality as subjective forms of consciousness. Applying the same principles to the outer world, he is obliged to deny the individuality of objects and to regard them as subjective phenomena of the one universal, primal will. The will is free in its being, but not in its action. (c) Schopenhauer is at variance with his metaphysical principles in inserting an equivalent of Plato's ideas into the blind, primal will. He explains all the phenomena of nature, especially teleology, as stages in the objectivation of the will in the form of externalized ideas. Nor is the tacit assumption of an external world, which is independent of consciousness, in accord with his principles.

(2) *Practical Philosophy*.—(a) "Life is a business, the earnings of which do not cover its expenses." Life is not worth living; for all will implies action, all action implies want, and all want implies pain, which is the essential condition of will. (b) Since the existence of the world and of ourselves

is something which ought not to be, the end of man consists in the "complete suppression of the will to live"—that is, in the endeavor to put an end to the individual forms of existence. (c) The negative deliverance of man from the perpetual pain and essential evil of existence is accomplished by three progressive means: first, by the disinterested contemplation of art, which separates intellect from will; second, by practising the virtues of compassion and justice, which make us sensible of the essential identity of all things and thereby destroy our individuation; third, by religious life in the sense of Buddhism—that is, complete submersion in the Nirvana by the extinction of the individual self.

300. CRITICAL NOTE.—Schopenhauer has the merit of distinguishing between intellect and will, which his idealistic predecessors had identified. But he errs in identifying the will with the thing in itself, and on this basis he builds up the first systematic philosophy of pessimism. His philosophy is an organic development of idealism, because he regards the first principle of all things as ideal, or spiritual. The doctrine of the world as will and idea is closely akin to the philosophy of Fichte, whose lectures Schopenhauer had attended. Fichte supplied the outlines of Schopenhauer's metaphysics. Schopenhauer's pessimism is modeled on the four "sublime truths" of Buddhism, which lead to Nirvana. Schopenhauer's metaphysics is a synthesis of phenomenalism and materialistic realism, of voluntarism and Platonism. His pessimism was continued by Edward von Hartmann and Nietzsche. His voluntarism was continued by Paulsen, Wundt, Bergson, and the pragmatists.

301. Eduard von Hartmann (1842–1906).—LIFE.—Hartmann, who was forced by illness to abandon a military career, sought to eliminate the contradictions from the system of Schopenhauer. Ethical pessimism and idealistic monism are common characters of their philosophies. Their chief differences lie in the explanation of the nature of the absolute and of the process of evolution, and in the details of ethics. Hartmann's principal work is entitled *Die Philosophie des Unbewussten*.

302. THEORETICAL PHILOSOPHY.—(1) *The Nature of the Absolute*.—As the first principle of all things Hartmann substitutes the unconscious for Schopenhauer's irrational, blind will. He explains the absolute as the substantial union of will and idea, the real and the ideal, the rational and the irrational. This formula is a combination of Schopenhauer's universal will, Hegel's universal reason, and Schelling's identity of the real and the ideal. Schopenhauer had laid the foundation of this doctrine in his metaphysics by inserting into the absolute will an equivalent of the ideas of Plato in order to bridge over metaphysically the transition from mere will to teleological volition. Hartmann himself finds the basis of his doctrine in the existence of the unconscious in nature and human life.

(2) *The Process of Evolution*.—The fusion of absolute reason with absolute will gives a distinctive character to Hartmann's pessimism. For Schopenhauer the "world-process" had neither plan nor purpose; for Hartmann it is the manifestation of an all-knowing reason. The extensive use of Hegel's view of evolution enables Hartmann to utilize a vast amount of knowledge drawn from every domain

of human achievement for the development of his theories. However, his pessimistic ethics frustrated his purpose of overcoming Schopenhauer's absolute pessimism by means of teleological and evolutionistic optimism.

(3) *Epistemology*.—As occasion required, Schopenhauer either followed Kant's theory of knowledge, or propounded a dogmatic and materialistic epistemology. Hartmann terms his own epistemology transcendental realism, and founds it on the category of causality. He considers an external and real world the only explanation of the facts of consciousness. Yet he considers matter merely a phenomenon. The external world consists of unconscious will.

(4) *Metaphysics*.—The world is a metaphysical evolution of the absolute. The absolute is unconscious, because its product (nature) is unconscious; and because, if the first principle were conscious, the evil in the world would be imputable to it. When the absolute goes over from its primal state of inert, unconscious will to actual volition, the object of its striving becomes real by this act of striving. This is the production of the world, whose essence also is, not matter, but unconscious will, like its principle.

303. PRACTICAL PHILOSOPHY.—The goal of the development of the world is deliverance from the misery of being, the peace of non-existence, and the return of the primal state of the identity of will and idea. In seeking happiness as their last end, men have mistaken the last end of all things. The true means for attaining the original state of the non-existence of consciousness is the intensification of human consciousness through cultural progress.

The greater the number of individuals who devote themselves to the intensive advancement of culture and civilization, the more surely and speedily will the desire for happiness here or hereafter be extinguished in mankind. When this has been attained, all being will lapse into non-being.

304. CRITICAL NOTE.—Divested of its technical terminology, Hartmann's metaphysics propounds three problems, which underlie all serious philosophical investigation: (1) the relation of the multiplicity of the objects of our experience to the one first principle; (2) the production of change by the immutable first cause; (3) the existence of evil in a world produced by the perfect good. Having failed to solve these problems, Hartmann advocates a practical philosophy of deliverance, which is a gruesome travesty of the Christian dogma of the Redemption, and is irreconcilable with any religion, except Buddhism.

According to Hartmann, the unconscious is the first principle of all things. (1) For consciousness presupposes limitation by another being, which it knows as an object, or non-ego. Hence, he concludes, only finite beings are conscious. (2) Hartmann further argues that consciousness presupposes passivity, because it can be aroused only by the action of an object upon it. Hence again, he infers, the first principle of all things is the unconscious.

Against the first argument of Hartmann it must be borne in mind: (a) that the consciousness and personality of the first principle do not presuppose limitation and the non-ego. They imply only that this principle is not merely real, but that its reality essentially includes substantial and self-actual knowl-

edge and will. These attributes stress its perfection without introducing limitations into its infinity. If the first principle were devoid of consciousness, it would lack the highest form of reality. The unconscious cannot be conceived as "the superconscious"—that is, as Hartmann explains, a being above consciousness—for there is no higher perfection than substantial, self-existent consciousness and will. (b) Nor does the pure act need to be aroused to consciousness by the action of an object upon it, since it contains all truth in itself and of itself. If it were awakened into consciousness, this state would be, like that of the human mind, a mosaic of many bits of knowledge, succeeding one another in time, retained by the effort of memory, and forced upon it by the exciting cause.

The second argument of Hartmann would be valid only on the supposition that the first principle is a potency. But, as Aristotle showed centuries ago, the first principle is a pure act; for the sufficient reason of finite beings cannot have the same nature they possess. In this case, it would not be their sufficient reason and their first cause, but would in its turn require an ulterior cause to make it comprehensible. Hartman's second argument also rests on the false assumption that there can be no activity without previous excitation by another object. Against this erroneous supposition it must be recalled that the first principle is by its nature pure actuality. This is the only inference possible in sound logic.

305. Friedrich Wilhelm Nietzsche (1844–1900).—
LIFE.—Nietzsche was professor of classical philology at Basle from 1869 until 1876, when eye- and

brain-trouble compelled him to take sick leave. His principal writings are *Die Geburt der Tragödie aus dem Geiste der Musik*; *Menschliches, Allzumenschliches*; *Also sprach Zarathustra*; *Jenseits von Gut und Böse*; *Ecce Homo*.

306. PHILOSOPHY. — Nietzsche rejects Schopenhauer's thesis that life is not worth living, because instinct and the will to live prove that life is worth living under certain conditions.

(1) *Romantic Period.*—In this period, Nietzsche regarded artistic culture as the only justification of life. He considered that this ideal was realized in Greek civilization, especially in the Attic tragedy, which is founded on the tragic mood (pessimism), the subordination of science to the needs of practical life, and a philosophy of aristocratic individualism. Modern civilization lacks this foundation, because it is ruled by a spirit of optimism surfeited with culture, by intellectualism (*fiat veritas, pereat vita*), and by a vulgar equalitarianism.

(2) *Intellectualistic Period.*—After his quarrel with Richard Wagner, Nietzsche replaced his estheticism by a freethinking ideal of life. In this period he rejected the religious, moral, and scientific reasons upon which the conviction of the existence of a supersensible world is founded, because he claimed that they are "human, all too human." This intellectualistic phase of Nietzsche's thought was soon superseded.

(3) *The Period of the Superman.*—The purpose of all things is the development of the superman—"the blond beast," who is characterized by the exuberance of ruthless power. This phase of Nietzsche's thought is a philosophy of values. He re-

gards the entire life of man from the viewpoint of biological over- and under-worths. The former are the virtues of Nietzsche's superman; the latter are the Christian virtues. Everything which fosters the development of the superman is good, true, and beautiful; everything which hinders his development is hideous, untrue, and evil. This perversion of ethical standards, making true virtue a vice and exalting vice into virtue, is the principle of the "revaluation of all values," which now determined Nietzsche's attitude toward the problems of science, ethics, religion, and art.

307. CRITICAL NOTE.—Nietzsche considers Christian morality the enemy of life, because, in his erroneous view, the precepts of Christian altruism and self-denial are at variance with nature, and thus prevent the development of the superman. According to his disparaging view of Christianity, the ethical ideas which dominate the Christian world to-day, are the "slave-morality," which the Romans forced on the Jews. The virtues which Nietzsche advocates for the superman constitute the "master-morality," which is the ruthless exercise of power over the masses by the upper class of society. These virtues are the will for power, the pathos of distance (the feeling of exaltation over the masses), ruthlessness, cruelty, selfishness, and sensuality. The individual must cultivate these virtues in himself, and the State must regard their development as its highest purpose. Nietzsche's doctrine of the superman is philosophy gone mad.

CHAPTER III

POSITIVISM

308. The Rise of Materialism.—In the nineteenth century philosophical materialism appeared first in France, where it was opposed by the spiritualistic (MAINE DE BIRAN, d. 1824; COUSIN, d. 1867) and the traditionalistic (DE MAISTRE, d. 1821; DE BONALD, d. 1841; LAMENNAIS, d. 1854) schools. In the middle of the nineteenth century materialism appeared in Germany (FEUERBACH, MOLESCHOTT, BÜCHNER, VOGT), when dissensions arose in the School of Hegel.

FECHNER (1801–87) and LOTZE (1817–81) were the leaders of the opposition against German materialism. They taught the subordination of physical phenomena to spiritual values and purposes. Fechner's metaphysics is a variation of Spinozism. Fechner contends that the world-soul animates all things; that the human soul is immortal because it is the partial content of the consciousness of the world-soul. The psychophysical parallelism, which Fechner introduced into philosophy, became the starting point of experimental psychology.

Lotze taught that the nature of reality is unknowable. What we perceive in objects is a perpetual action and reaction in relations. In endeavoring to explain how this activity takes place, he says that

all things are interdependent parts of a single spiritual substance; for only a spiritual substance is the sufficient reason of the unity which is apparent throughout all the change and variety of the manifestations of apparently individual and independent beings. Lotze's philosophy is an offshoot of the monadology of Leibniz.

The last decades of the nineteenth century witnessed a revival of materialism in Germany under the influence of Darwin's *Origin of Species* (1859). DAVID STRAUSS (d. 1874) and ERNST HAECKEL (whose charlatan methods and biological forgeries are now generally known) developed Darwin's theory of mechanical evolution into a monistic view of the world.

309. Positivism.—Positivism, which is the characteristic tendency of the second half of the nineteenth century, was the second reaction against materialism. The positivists reject both materialism and idealism by the assertion that knowledge is essentially relative and subjective. However, they agree with materialism in limiting the domain of science to the objects of sense-experience, and with idealism in admitting at least the existence of supersensible reality. Though positivism is rather a scientific method than a system of philosophy, French positivists incline toward materialism, the Germans toward idealism, while the English take an intermediate position.

310. French Positivism: Auguste Comte (1798–1857).—Comte, the founder of positivism, holds that science knows only facts and laws; that induction is the only method of science; that the scope of philosophy is to establish the laws of the succession and

the connection of sense phenomena. Comte rejects the absolute and the metaphysical, substance and cause, efficient and final causes, as antiquated conceptions. Comte's philosophical position is founded on the so-called "law of the three stages." In the course of history philosophical thought has passed through three stages: (1) in the theological stage men regarded all phenomena as due to supernatural agents (fetishism, polytheism, monotheism); (2) in the metaphysical stage all phenomena were referred to the nature of things in themselves (substance, essence, forces); (3) in the positivistic stage of philosophy man contents himself with the explanation of phenomena by laws expressing their relations. Philosophy is the organization of the results of science into a systematic unit.

Sociology (a term made current by Comte) is the highest science. Its object is to determine the biological laws of social life, the general conditions required for the social existence of the individual, the family, and the State, and finally to ascertain the laws of social progress. The social instinct is the origin of the State. "To live for others," is the fundamental law of ethics. In the development of the State, Comte distinguishes three stages, corresponding to the three stages of philosophy: the militaristic, juridical, and industrial.

Progress can be achieved in society only if the liberty of the individual is restrained by religious motives from degenerating into license. For this purpose Comte created the new religion of humanitarianism. Its fundamental dogma is expressed in the words: "Love as the principle, order as the foundation, progress as the purpose." The trinity

of this religion is the "Great Being," which comprises all who contribute to the progress of society; the "Great Environment," which is space; and the "Great Fetish," which is the earth. Comte capped the climax of this absurdity by instituting a calendar in which each day has its positivistic patron, a system of nine social sacraments, and a positivistic priesthood, exercising the office of counsellor, teacher, and judge to society. The influence of Comte was widely spread through Taine and Renan.

311. English Positivism: Herbert Spencer (1820-1903).—Spencer was the leading exponent of positivism. Spencer terms his philosophy synthetic, because it is an attempt to combine all the sciences into a connected whole. The chief doctrines of Spencer are indicated in the following propositions:

(1) Spencer starts with the principle of the relativity of knowledge: all knowledge is limited to relations, and consists in a system of generalizations. Things in themselves are unknowable, because all actual and possible evidence of such knowledge is unsatisfactory.

(2) "By continually seeking to know, and being constantly thrown back with a deepened conviction of the impossibility of knowing, we may keep alive the consciousness that it is alike our highest wisdom and our highest duty to regard that through which all things exist as the unknowable."

(3) The laws of mechanics are summed up in the principle of the persistence of force, or the indestructibility of energy.

(4) From the persistence of force there follow the indestructibility of matter, and the continuity and rhythm of motion.

(5) The unknowable, time, space, matter, motion, and force are the postulates on which all other truths depend.

(6) The formula of (mechanical) evolution: "Evolution is an integration of matter and the concomitant dissipation of motion, during which matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity, and during which the retained motion undergoes a parallel transformation."

(7) The causes which necessitate this evolution from the homogeneous to the heterogeneous, and from the indefinite and incoherent to the definite and coherent, are: (a) the instability of the homogeneous, which is consequent upon the different exposures of different parts to various forces; and (b) the multiplication of effects.

(8) Equilibrium is the goal of evolution: "Evolution can end only in the establishment of the greatest perfection and the most complete happiness."

(9) Dissolution is the counter-change, which sooner or later every evolved aggregate undergoes. Once equilibrium is reached, all change takes place in the direction of disintegration.

(10) "That which persists unchanging in quantity, but constantly changing in form, under those sensible appearances which the universe presents to us, transcends human knowledge. It is an unknown and unknowable power, which we are obliged to recognize as without limit in space and without beginning and end in time."

(11) "Life is the adjustment of internal relations to external relations."

(12) Social progress is an advance in the number

and the complexity of the adjustments of organisms to environment.

(13) The worship of the dead, especially ancestor-worship, is the origin of religion.

(14) The belief that life is for work should be superseded by the principle that work is for life; and, instead of the individual existing for the State, the State should exist for the individual.

(15) Physical, biological, and social conditions are the source of ethics. Morally good conduct is highly evolved conduct.

(16) The aim of morality is to produce vitality and thus to procure the health of society.

(17) Our moral sense is the highly evolved product of a series of modifications, which have been going on since the origin of man, and have resulted in the present mentality and morality of man. The strength and weakness of Spencer lies in his brilliant generalizations.

312. John Stuart Mill (1806-73).—Mill is a powerful advocate of positivism, and combines the doctrines of Hume with those of Comte. His philosophical writings extend only to logic and ethics. In logic he has the merit of having for the first time scientifically formulated the canons of induction (the methods of agreement, difference, residues, and concomitant variations). For the rest, he explains the external world as an illusion, doubts the uniformity of nature, denies the universality and necessity of the laws of thought, and interprets causality as the mere invariable succession of phenomena. Substance is the permanent possibility of sensation; the mind is the permanent possibility of feeling. Mill's ethics is utilitarian, advocating the greatest-

happiness theory and defending it against the charge of selfishness.

313. German Positivism.—In the guise of Neo-Kantianism, positivism found many adherents in Germany. The Neo-Kantian philosophy may be summed up as advocating Kantian apriorism in epistemology, phenomenalism in natural science, and idealism in metaphysics.

WILHELM WUNDT (1832–1920) and RUDOLF EUCKEN (1846–1926) are the leaders of German thought striving to get beyond the positivistic ideal of science. Wundt developed Fechner's psychophysical parallelism, and founded an institute for experimental psychology (1878), which has become the model for similar institutes. His philosophy is an attempt to combine positivism with idealism. Wundt determines the nature of psychic being according to three principles: (1) the principle of actuality: psychic being is an act, or a process. Hence there is no psychic substance. The human soul is the sum of psychic acts contained in one consciousness. Psychic being is identical with, or at least analogous to will. (2) The principle of creative synthesis: the product of the combination of psychic elements possesses properties which these elements do not possess. The amount of energy in the psychic order increases; that in the physical order remains constant. (3) The principle of relating analysis: when a psychic act is analyzed into its elements, their relation to this act gives them properties which they do not individually possess. On this basis Wundt builds up an epistemology, which finds in psychological but not in physical experience the sufficient reason of our concepts. Nor do our reason-

ings possess more than psychological necessity and validity. In metaphysics this theory leads to voluntaristic actualism; in religion it leads to monistic actualism. As a whole, Wundt's philosophy has few followers, but his psychology has been carried on and developed by many scholars of note, such as KÜLPE, MEUMANN, ZIEHEN, COHN, LIPPS, TITCHENER, and MÜNSTERBERG.

Eucken's general attitude in philosophy is expressed in the rejection of all *a priori* construction and the demand of an empiric foundation for philosophy. His noölogical method consists in investigating the phenomena of mental life as a totality for the purpose of ascertaining whether a unitary process of activity underlies them and directs them toward a common end. As a result of this investigation, he holds that there exists a realm of reason of which all personal life constitutes an integral part. In common with Fichte, Eucken understands this realm as a task given to mankind, and describes it in vague formulas, such as "rising to essence through action." Eucken's intention is rather to work out a philosophy of life than a theoretical system. His philosophy has the merit of vigorous and outspoken opposition to naturalism and positivism, but he does not express himself clearly on the nature of God, the last end of man, and similar questions.

314. Pragmatism: William James (1842-1910).—The term "pragmatism," made current by James, its leading exponent, is an American variation of positivism. The pragmatist philosophy agrees with positivism in denying the possibility of metaphysics, but differs from it in making knowledge unduly subservient to the practical needs of life. Like Nietzsche

in the period of the superman, the pragmatists decide all philosophical problems from the point of view of their biological worth, without however propounding the brutalities which disfigure his thought. Pragmatism teaches the primacy of the will in the principle that "our passional nature not only lawfully may, but must decide an option between propositions, whenever it is a genuine option that cannot by its nature be decided on intellectual grounds." The method of pragmatism consists in reducing the logical to the teleological: "Theories become instruments, not answers to enigmas, in which we can rest." Hence also the pragmatistic criterion of truth: "Truth is that which 'works' in relation to a purpose." "The true is the name of whatever proves itself to be good in the way of belief, and good too for definite, assignable reasons." Truth is not objective, but truths are valid if they prove their worth in the struggle of life. If a hypothesis is fruitful and useful for the practical demands of life, it has demonstrated its right to existence.

On the whole, pragmatism offers only a new theory of truth. This theory is new in so far as it interprets the relativity and subjectivity of knowledge—the basic idea of Greek sophism—in the light of evolution. "Pragmatism agrees with nominalism in always appealing to particulars, with utilitarianism in emphasizing practical aspects, with positivism in its disdain for metaphysical abstractions."

CHAPTER IV

CHRISTIAN PHILOSOPHY

315. Schools.—There were four Schools of Christian philosophers during the nineteenth century: the Scholastics, and the unsatisfactory and in part unorthodox traditionalists, ontologists, and rationalists.

316. Traditionalism. — Traditionalism originated in France as a reaction of Catholic thinkers against the rationalism which had grown out of the French Enlightenment. The Encyclopedists had denied all authority, and proclaimed the sovereignty of the individual mind. On the other hand, the traditionalists subscribed to the equally one-sided assertion that the individual mind is essentially incapable of knowing with certainty by its own power any ethical or religious truth, and that all intellectual knowledge comes to us by tradition.

LOUIS DE BONALD (1754–1840), the founder of traditionalism, appealed to the psychology of language to prove his contentions: man thinks the word before speaking his thought; therefore, language was given to man immediately by God. Now, language implies knowledge and certainty concerning all religious, ethical, and social truths; hence, divine revelation is the ultimate source of these truths. This theory culminates in the thesis that philosophy begins with faith.

HUGH DE LAMENNAIS (1782-1854) utilized all the arguments of ancient scepticism to prove that neither the evidence of sense nor that of intellectual cognition, but only the universal consent of mankind, is the criterion of truth. After leaving the Church, Lamennais inclined toward Hegel's pantheism, and interpreted the collective reason of mankind in the sense of Hegel's objective spirit.

LOUIS BAUTAIN (1796-1867) endeavored to avoid the consequences of the theories of Lamennais by setting up the infallible teaching of the Catholic Church as the sole principle of certainty. He asserted that all the fundamental truths of philosophy are contained in the deposit of faith, and that the scope of philosophy is to discover them and to confirm them by experience and reason.

317. Ontologism combines the mystic intuition of God with the Platonic view that it is the source and guarantee of all our knowledge. Marsilius Ficinus and Malebranche are the forerunners of modern ontologism.

ALPHONSE GRATRY (1805-72) teaches that man knows God by means of the inductive dialectic method, which consists in eliminating the imperfections attaching to the perfections of creatures, and thereby affirming without intermediary mental processes the Infinite in its existence and its perfections. The divine sense, or sense of the Infinite, enables us to know God in this way. The possession of the divine sense is the essential prerequisite for the formation of inductive dialectical judgments, and it is impossible for man to know God except through this sense.

ANTONIO ROSMINI (1797-1855) taught that the idea

of being, possessing the properties of necessity, infinity, and eternity, is innate in the human mind. This idea is the principle of all intellectual knowledge, and is identical with the "light of reason." The process of intellectual cognition is as follows: (1) the "percept" is combined with the innate idea of being and made the object of an existential judgment (intellectual perception); (2) the concrete idea is formed from the intellectual perception by abstracting from the existence of the object (universalization); (3) the abstract idea is formed from the concrete idea by abstracting from all its individualizing marks; (4) knowledge, therefore, consists of a formal or *a priori* element (which is the innate idea of being) and of a material or *a posteriori* element (which is sensation). Generic and specific concepts are differentiations of the innate idea of being, effected with the aid of sensation by the universalizing and abstractive activities of the mind. Rosmini does not expressly identify the innate idea of being with God, but he asserts that it is something divine in the proper sense, identical with the *Logos*, having the same essence as God, etc.¹ In his voluminous writings Rosmini treated the main topics of metaphysics, and he is regarded by some scholars as the most profound thinker of Italy after St. Thomas. Rosmini's ontologism and other doctrines were condemned by the Holy See, December 14, 1887.²

VINCENZO GIOBERTI (1801-52) found fault with Rosmini's psychologism, and substituted for it the immediate intuition of God. On the principle,

¹ See DENZINGER-BANNWART, *Enchiridion*, nn. 1891 sqq.

² DENZINGER-BANNWART, *loc. cit.*

“primum ontologicum est primum psychologicum,” he postulates the idea of God as an original innate idea in the mind, and as the principle of all cognition. By the thesis that God is the only being, and that all creatures are merely existences, Gioberti justifies his assumption that the order of cognition corresponds to the real order. Knowing God, we know the creative act, and consequently its object. But, knowing mere existences, we can form no idea.

318. Theological Rationalism. — Numerous attempts were made in the nineteenth century to reconcile modern philosophy with the Catholic Faith. The authors of these attempts usually began with the false assumption that supernatural truths can be correctly restated in terms of necessary philosophical judgments, and proved by means of philosophical arguments. In Germany, GEORGE HERMES constructed a system of apologetics on the basis of the philosophy of Kant. FRANCIS BAADER followed Philo in the allegorical interpretation of revelation in order to reconcile it with philosophy. ANTON GÜNTHER sought to formulate Catholic dogma in terms of Hegel's philosophy. Similar attempts were made in other countries. They were foredoomed to failure because of the essential difference between the natural and the supernatural.

319. Scholasticism.—During the eighteenth century the study of Scholastic philosophy was confined almost exclusively to the monasteries, seminaries, and certain universities in Italy. Though a comparatively large number of Scholastic treatises were published during this time, few of them possess outstanding merits. The Thomist School made notable efforts to sustain and spread both the doctrines

peculiar to itself and also the system which in the thirteenth century had been universally accepted by the Schoolmen.

The Romantic Movement, which in the beginning of the nineteenth century began to spread throughout Western Europe, created extensive interest in medieval science and culture. The quickening of the faith and of ecclesiastical spirit in the first decades of the nineteenth century brought the Fathers and Doctors of the Church once more into the focal point of attention in the Catholic world. Religious tolerance also stimulated speculative studies. Given these conditions, Scholastic philosophy quickly emerged from the seclusion which had been forced upon it during the superficial days of the Enlightenment. MATTEO LIBERATORE'S *Institutiones Philosophicæ* (1840) and WERNER'S historical treatises on Scholastic philosophy from the time of St. Thomas were the earliest works in this field during this period (1858-61). They were followed by SANSEVERINO and KLEUTGEN in Italy and STÖCKL in Germany. JOSEF KLEUTGEN, S.J., whom Leo XIII termed the "Prince of Philosophers," not only wrote an exceptionally able exposition of Scholasticism in his *Philosophie der Vorzeit* and *Theologie der Vorzeit*, but in the same works also showed its undiminished vigor and its ability to cope with modern thought.

As false philosophy imperils the Faith, the Church was obliged to point out the errors of traditionalism, ontologism, and rationalism. The condemnation of these and other false philosophical views by Pius IX was the first step toward the restoration of Scholasticism. The founding of a philosophical and theological academy by the same Pope was a constructive

measure in the same direction. The chapter on faith and reason, which is contained in the Constitution "On the Catholic Faith" promulgated by the Vatican Council, is at least an implied approbation of the Scholastic doctrine.

The Encyclical Letter *Æterni Patris*, which Leo XIII issued on August 4, 1879, gave the highest ecclesiastical recognition to the growing Scholastic movement. The restoration of Scholasticism, which this letter officially brought about, is not a simple repristination of thirteenth-century thought, but rather the acceptance of those doctrines of Scholasticism the truth of which is established, and their development and enrichment by means of the philosophical and scientific achievements of modern times. The Pope's words on this subject are explicit, for he lays down the following principles for the guidance and development of Scholastic studies: (1) the philosophy of St. Thomas is to be taught in Catholic institutions of learning; (2) it is to be studied in the original sources; (3) all philosophical and scientific truths and discoveries, from whatever source they proceed, must be willingly accepted;³ (4) mere subtleties, unproved statements, and all disproved theories and assumptions of the Schoolmen must be avoided.⁴

The successors of Leo XIII in the Apostolic See have lost no opportunity to foster Scholastic studies. Thus, Pius X removed the "new apologetics" and

³ "*Libenti gratoque animo excipiendum esse quidquid sapienter dictum, quidquid utiliter fuerit a quopiam inventum atque excogitatum.*"

⁴ "*Si quid est a doctoribus scholasticis vel nimia subtilitate quæsitum, vel parum considerate traditum, si quid cum exploratis posterioris ævi doctrinis minus cohærens, vel denique quoquo modo non probabile, id nullo pacto in animo est ætati nostræ ad imitandum proponi.*"

modernism from the path of progress. In the Code of Canon Law, Benedict XV made mandatory for seminaries the teaching of philosophy according to the method, the principles, and the doctrine of St. Thomas. Pius XI made the study of Scholastic philosophy for a period of at least two years obligatory upon ecclesiastical students, and again held up St. Thomas as a model and leader in the Encyclical Letter *Studiorum Duce*m.

One of the first tasks undertaken by the friends of Scholasticism was the discovery and publication of the works of the Schoolmen. For, although the writings of the principal Schoolmen were well known, scientific editions were lacking, and the minor lights in Scholastic philosophy and theology were almost totally unknown. Leo XIII commissioned the publication of the works of St. Thomas in accord with the exigencies of modern scholarship. The Franciscan house of writers in Quaracchi published a model edition of the works of St. Bonaventure. BÄUMKER's *Beiträge* contain a considerable number of valuable texts. Individual scholars, such as DE WULF, MANDONNET, PELZER, EHRLE, and GRABMANN, have also made much valuable material accessible.

On the basis of these texts, which have been published or at least located and identified, the history of Scholasticism remains to be written in detail. The teachings of individuals must be established, their sources and the use which they made of them must be determined, and their influence must be traced. The object of these studies is not a retrospective historicism, but in the last analysis an accurate and sure understanding of Scholastic texts.

Controversies will be finally settled in this way, and doubts on many secondary matters removed.

The most important and difficult task which confronts students of Scholasticism to-day is the assimilation into the Scholastic system of the achievements of modern science and its organic development by this means. The difficulties are not a few: the science of the nineteenth century has yielded a flood of important data; the distinction between hypothesis on the one hand, and established fact and law on the other, is often a delicate matter; facts are sometimes colored by preconceived ideas; considerable financial resources are necessary for laboratories, libraries, and subsidies; a larger number of capable scholars must be trained and given the opportunity for investigation, and international organization of research must eliminate duplication and waste of effort.

With a history of less than half a century to look back upon and a steady growth of valuable achievement to record, the promise of the future of Scholastic studies is fraught with hope and encouragement.

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